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If you have any questions or comments relating to Samsung products, please contact the SAMSUNG customer care center.

Contacte con SAMSUNG WORLDWIDE

Si tiene alguna pregunta o comentario referente a nuestros productos, por favor contacte con nuestro Servicio de Atención al Cliente.

Country	Customer Care Center☎	Web Site	Address
CANADA	1-800-SAMSUNG(726-7864)	www.samsung.com/ca	Samsung Electronics Canada Inc., Customer Service 55 Standish Court Mississauga, Ontario L5R 4B2 Canada
			Samsung Electronique Canada Inc., Service à la Clientèle 55 Standish Court Mississauga, Ontario L5R 4B2 Canada
U.S.A	1-800-SAMSUNG(726-7864)	www.samsung.com	Samsung Electronics America, Inc. 105 Challenger Road Ridgefield Park, NJ 07660-0511

BN68-01514P-00

SERIES 3

330

LCD TV

user manual

imagine the possibilities

Thank you for purchasing a Samsung product. To receive a more complete service, please register your product at

www.samsung.com/global/register

Model _____ Serial No. _____

Important Warranty Information Regarding Television Format Viewing

Wide screen format LCD Displays (16:9, the aspect ratio of the screen width to height) are primarily designed to view wide screen format full-motion video. The images displayed on them should primarily be in the wide screen 16:9 ratio format, or expanded to fill the screen if your model offers this feature and the images are constantly moving. Displaying stationary graphics and images on screen, such as the dark side-bars on nonexpanded standard format television video and programming, should be limited to no more than 5% of the total television viewing per week.
Additionally, viewing other stationary images and text such as stock market reports, video game displays, station logos, web sites or computer graphics and patterns, should be limited as described above for all televisions. Displaying stationary images that exceed the above guidelines can cause uneven aging of LCD Displays that leave subtle, but permanent burned-in ghost images in the LCD picture. To avoid this, vary the programming and images, and primarily display full screen moving images, not stationary patterns or dark bars.
On LCD models that offer picture sizing features, use these controls to view different formats as a full screen picture.
Be careful in the selection and duration of television formats used for viewing. Uneven LCD aging as a result of format selection and use, as well as burned-in images, are not covered by your Samsung limited warranty.

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SAMSUNG ELECTRONICS NORTH AMERICAN LIMITED WARRANTY STATEMENT

Subject to the requirements, conditions, exclusions and limitations of the original Limited Warranty supplied with Samsung Electronics (SAMSUNG) products, and the requirements, conditions, exclusions and limitations contained herein, SAMSUNG will additionally provide Warranty Repair Service in the United States on SAMSUNG products purchased in Canada, and in Canada on SAMSUNG products purchased in the United States, for the warranty period originally specified, and to the Original Purchaser only.

The above described warranty repairs must be performed by a SAMSUNG Authorized Service Center. Along with this Statement, the Original Limited Warranty Statement and a dated Bill of Sale as Proof of Purchase must be presented to the Service Center. Transportation to and from the Service Center is the responsibility of the purchaser.

Conditions covered are limited only to manufacturing defects in material or workmanship, and only those encountered in normal use of the product.

Excluded, but not limited to, are any originally specified provisions for, in-home or on-site services, minimum or maximum repair times, exchanges or replacements, accessories, options, upgrades, or consumables.

For the location of a SAMSUNG Authorized Service Center, please call toll-free:

In the United States : 1-800-SAMSUNG (1-800-726-7864) **In Canada : 1-800-SAMSUNG**

➢ See the warranty card for more information on warranty terms.

Precautions When Displaying a Still Image

A still image may cause permanent damage to the TV screen

- Do not display a still image on the LCD panel for more than 2 hours as it can cause screen image retention. This image retention is also known as "screen burn". To avoid such image retention, reduce the degree of brightness and contrast of the screen when displaying a still image.
-  Watching the LCD TV in 4:3 format for a long period of time may leave traces of borders displayed on the left, right and center of the screen caused by the difference of light emission on the screen.
 Playing a DVD or a game console may cause a similar effect to the screen.
 Damages caused by the above effect are not covered by the Warranty.
- Displaying still images from Video games and PC for longer than a certain period of time may produce partial after-images.
 To prevent this effect, reduce the 'brightness' and 'contrast' when displaying still images.

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Symbol	Press	Note	One-Touch Button

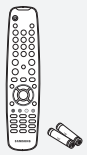
General Information

List of Features

- Adjustable picture settings that can be stored in the TV's memory.
- Automatic timer to turn the TV on and off.
- A special sleep timer.
- Excellent Digital Interface & Networking :
 With a built-in HD digital tuner, non-subscription HD broadcasts can be viewed with no Cable Box/Satellite receiver (Set-Top Box) needed.
- **HDMI/DVI connection of your PC to this TV.**
- Excellent Picture Quality
- SRS TruSurround XT
 - SRS TruSurround XT provides a virtual surround system.

Accessories

Please make sure the following items are included with your LCD TV.
If any items are missing, contact your dealer.



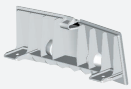
Remote Control & Batteries (AAA x 2)
(BN59-00678A)



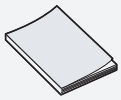
Power Cord
(3903-000144)



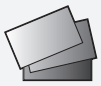
Cleaning Cloth
(BN63-01798A)



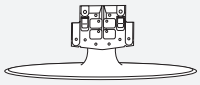
Cover-Bottom
(BN63-03093A)



Owner's Instructions



Warranty Card / Registration Card /
Safety Guide Manual
(Not available in all locations)



Stand
(BN96-07542B)



Stand Screw (M4XL16)
(6002-001294)



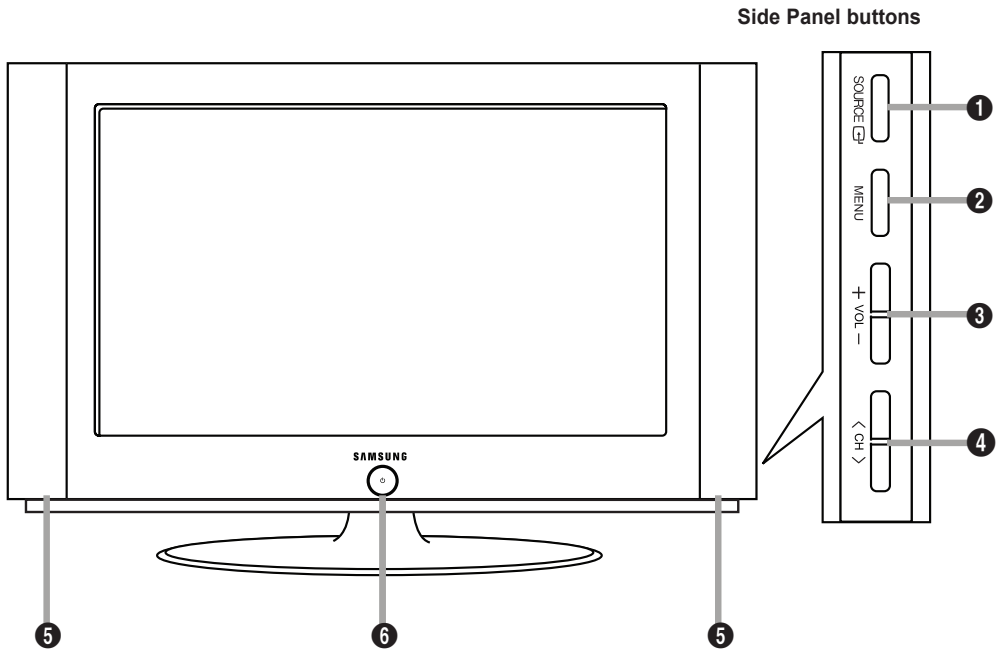
Stand Screw (M4XL14)
(6003-001334)

➢ The items color and shape may vary depending on the model.

Viewing the Control Panel

Buttons on the Lower-Right Part of the Panel

The buttons on the lower-right panel control your TV's basic features, including the on-screen menu. To use the more advanced features, you must use the remote control.



➢ The product color and shape may vary depending on the model.

❶ **SOURCE** ⏎
Toggles between all the available input sources (TV, AV, Component1, Component2, PC, HDMI1, HDMI2).
In the on-screen menu, use this button as you would use the **ENTER** ⏎ button on the remote control.

❷ **MENU**
Press to see an on-screen menu of your TV's features.

❸ **+ VOL -**
Press to increase or decrease the volume.
In the on-screen menu, use the **+ VOL -** buttons as you would use the ◄ and ► buttons on the remote control.

❹ **< CH >**
Press to change channels.
In the on-screen menu, use the **< CH >** buttons as you would use the ▼ and ▲ buttons on the remote control.

❺ **SPEAKERS**

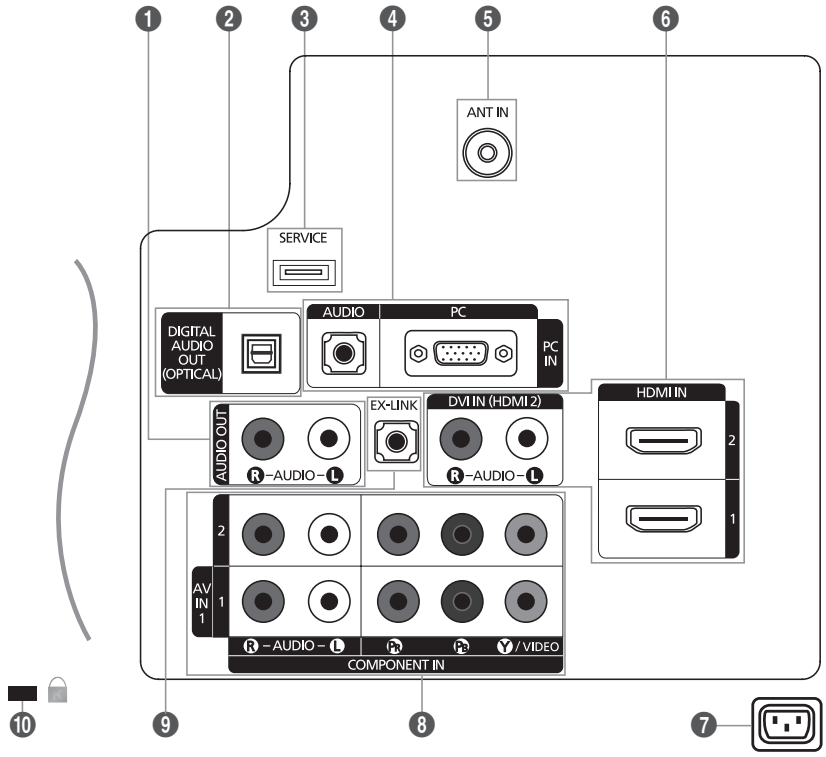
❻ ⏻ **(POWER)**
Press to turn the TV on and off.

REMOTE CONTROL SENSOR
Aim the remote control towards this spot on the TV.

POWER INDICATOR
Blinks and turns off when the power is on and lights up in stand-by mode.

Viewing the Connection Panel

Use the connection panel jacks to connect A/V components that will be connected continuously, such as DVD players or a VCR. For more information on connecting equipment, see pages 6~12.



➢ The product color and shape may vary depending on the model.

❶ **AUDIO OUT**
Connects to the audio input jacks on your Amplifier/ Home theater.

❷ **DIGITAL AUDIO OUT (OPTICAL)**
Connects to a Digital Audio component.

❸ **SERVICE**
Connector for SERVICE only.

❹ **PC IN [PC] / [AUDIO]**
Connects to the video and audio output jacks on your PC.

❺ **ANT IN**
Connects to an antenna or cable TV system.

❻ **HDMI IN 1, 2 / DVI IN(HDMI2)[R-AUDIO-L]**
Connects to the HDMI jack of a device with an HDMI output.
Use the HDMI IN 2 jack for DVI connection to an external device.
Use a DVI to HDMI cable or DVI-HDMI adapter (DVI to HDMI) for video connection and the DVI IN (HDMI2) [R-AUDIO-L] jacks for audio.
- No sound connection is needed for an HDMI to HDMI connection.
- When using an HDMI/DVI cable connection, you must use the HDMI IN 2 jack.

❼ **POWER INPUT**
Connects the supplied power cord.

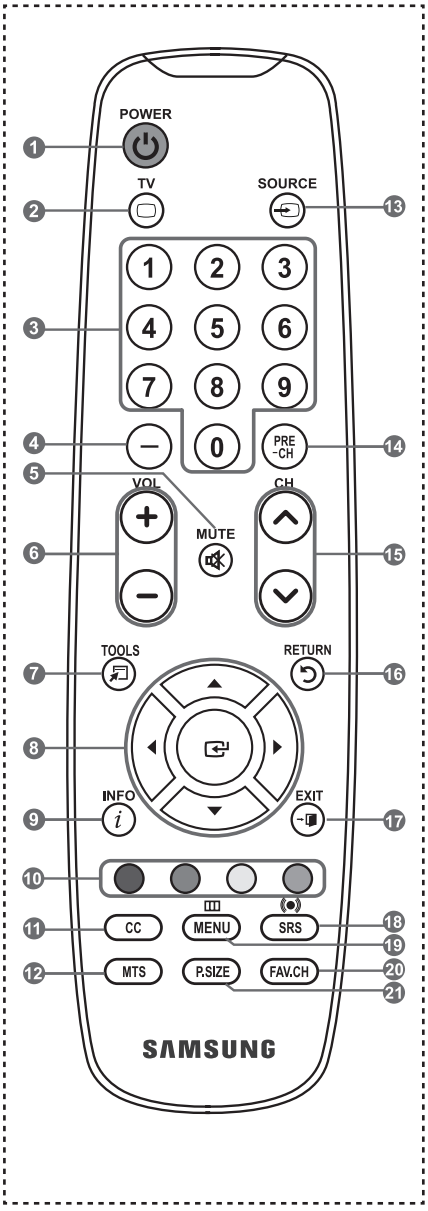
❽ **COMPONENT IN 1, 2 / AV 1**
The COMPONENT IN 1 jack is also used as the AV IN 1 jack.
- Connect the video cable to the COMPONENT IN 1 [Y/VIDEO] jack and the audio cable to the COMPONENT IN 1 [R-AUDIO-L] jacks.

❾ **EX-LINK**
- Connect this to the jack on the optional wall mount bracket. This will allow you to adjust the TV viewing angle using your remote control.

❿ **KENSINGTON LOCK**
The Kensington Lock (optional) is a device used to physically fix the system when used in a public place. If you want to use a locking device, contact the dealer where you purchased the TV.
➢ The location of the Kensington Lock may be different depending on its model.

Remote Control

You can use the remote control up to a distance of about 23 feet from the TV.



❶ **POWER**
Turns the TV on and off.

❷ **TV**
Selects the TV mode directly.

❸ **NUMERIC BUTTONS**
Press to change the channel.

❹ ⊖
Press to select additional channels(digital and analog) being broadcast by the same station. For example, to select channel "54-3", press "54", then press "⊖" and "3".

❺ **(MUTE)**
Press to temporarily cut off the sound.

❻ **VOL⊕ / VOL⊖**
Press to increase or decrease the volume.

❼ **TOOLS**
Use to quickly select frequently used functions.

❽ **UP▲ / DOWN▼ / LEFT◄ / RIGHT► / ENTER**
Use to select on-screen menu items and change menu values.

❾ **INFO**
Press to display information on the TV screen.

❿ **COLOR BUTTONS**
Use these buttons in the Channel list, etc.

⓫ **CC**
Controls the caption decoder.

⓬ **MTS**
Press to choose stereo, mono or Separate Audio Program (SAP broadcast).

⓭ **SOURCE**
Press to display and select the available video sources.

⓮ **PRE-CH**
Tunes to the previous channel.

⓯ **CH⊙ / CH⊙**
Press to change channels.

⓰ **RETURN**
Returns to the previous menu.

⓱ **EXIT**
Press to exit the menu.

⓲ **SRS**
Selects SRS TruSurround XT mode.

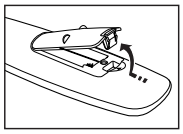
⓳ **MENU**
Displays the main on-screen menu.

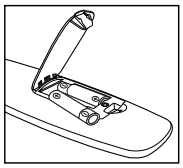
⓴ **FAV.CH**
Press to switch to your favorite channels.

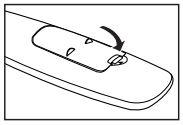
㉑ **P.SIZE**
Picture size selection.

➢ The performance of the remote control may be affected by bright light.

Installing Batteries in the Remote Control







1. Lift the cover at the back of the remote control upward as shown in the figure.
2. Install two AAA size batteries.
 ➢ Make sure to match the "+" and "–" ends of the batteries with the diagram inside the compartment.
3. Replace the cover.
 ➢ Remove the batteries and store them in a cool, dry place if you won't be using the remote control for a long time.

 The remote control can be used up to about 23 feet from the TV.
 (Assuming typical TV usage, the batteries should last for about one year.)

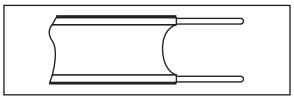
➢ **If the remote control doesn't work, check the following:**

1. Is the TV power on?
2. Are the plus and minus ends of the batteries reversed?
3. Are the batteries drained?
4. Is there a power outage or is the power cord unplugged?
5. Is there a special fluorescent light or neon sign nearby?

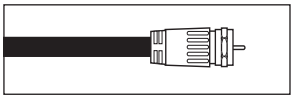
Connections

Connecting VHF and UHF Antennas

If your antenna has a set of leads that look like the diagram to the right, see "Antennas with 300 Ω Flat Twin Leads" below.



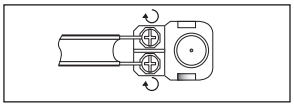
If your antenna has one lead that looks like the diagram to the right, see "Antennas with 75 Ω Round Leads".
If you have two antennas, see "Separate VHF and UHF Antennas".



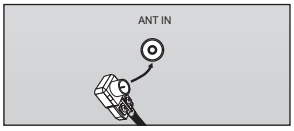
Antennas with 300 Ω Flat Twin Leads

If you are using an off-air antenna (such as a roof antenna or "rabbit ears") that has 300 Ω twin flat leads, follow the directions below.

1. Place the wires from the twin leads under the screws on a 300-75 Ω adapter (not supplied).
 Use a screwdriver to tighten the screws.

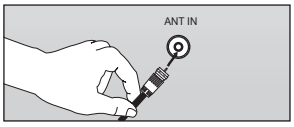


2. Plug the adaptor into the ANT IN terminal on the back of the TV.



Antennas with 75 Ω Round Leads

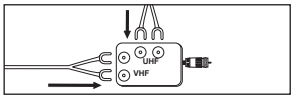
1. Plug the antenna lead into the ANT IN terminal on the back of the TV.



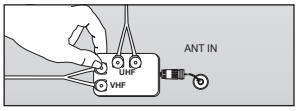
Separate VHF and UHF Antennas

If you have two separate antennas for your TV (one VHF and one UHF), you must combine the two antenna signals before connecting the antennas to the TV. This procedure requires an optional combiner-adaptor (available at most electronics shops).

1. Connect both antenna leads to the combiner.



2. Plug the combiner into the ANT IN terminal on the bottom of the rear panel.

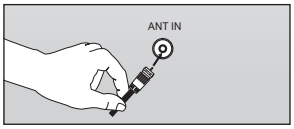


Connecting Cable TV

To connect to a cable TV system, follow the instructions below.

Cable without a Cable Box

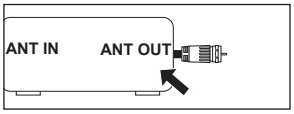
1. Plug the incoming cable into the ANT IN terminal on the back of the TV.
➢ Because this TV is cable-ready, you do not need a cable box to view unscrambled cable channels.

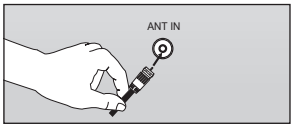


Connecting to a Cable Box that Descrambles All Channels

1. Find the cable that is connected to the ANT OUT terminal on your cable box.
➢ This terminal might be labeled "ANT OUT", "VHF OUT" or simply, "OUT".

2. Connect the other end of this cable to the ANT IN terminal on the back of the TV.

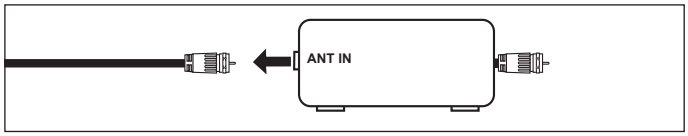




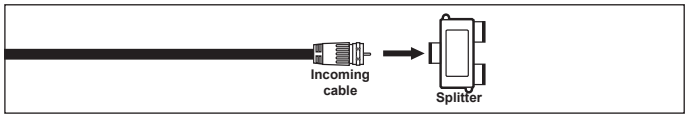
Connecting to a Cable Box that Descrambles Some Channels

If your cable box descrambles only some channels (such as premium channels), follow the instructions below. You will need a two-way splitter, an RF (A/B) switch and four lengths of RF cable. (These items are available at most electronics stores.)

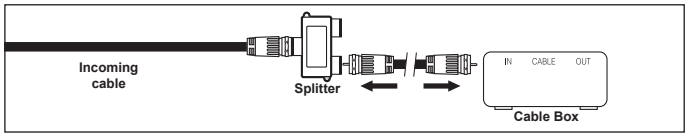
1. Find and disconnect the cable that is connected to the ANT IN terminal on your cable box.
➢ This terminal might be labeled "ANT IN", "VHF IN" or simply, "IN".



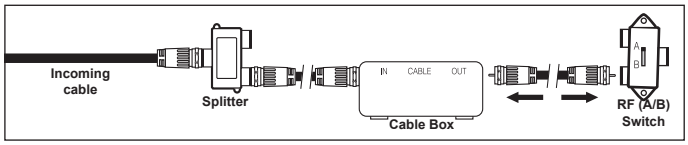
2. Connect this cable to a two-way splitter.



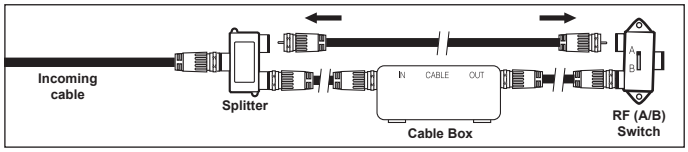
3. Connect an RF cable between the OUTPUT terminal on the splitter and the IN terminal on the cable box.



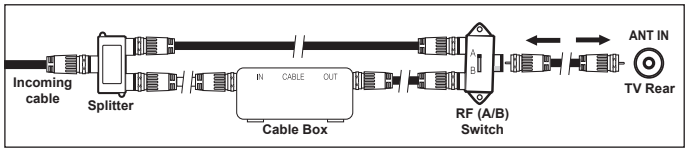
4. Connect an RF cable between the ANT OUT terminal on the cable box and the B–IN terminal on the RF(A/B) switch.



5. Connect another cable between the other OUT terminal on the splitter and the A–IN terminal on the RF (A/B) switch.



6. Connect the last RF cable between the OUT terminal on the RF (A/B) switch and the ANT IN terminal on the rear of the TV.

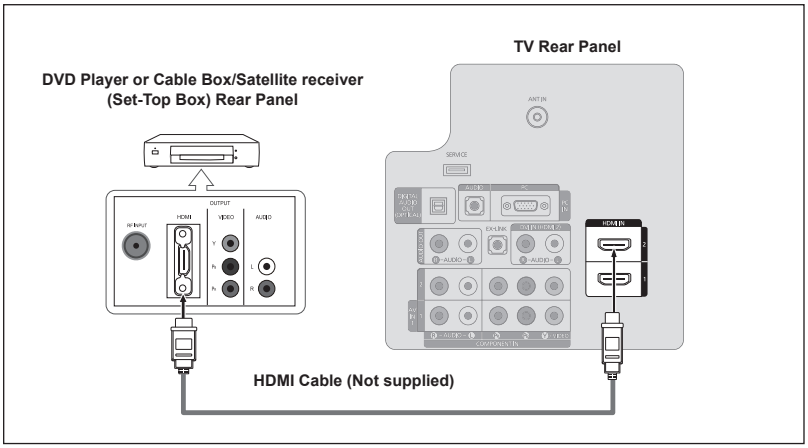


After you have made this connection, set the A/B switch to the "A" position for normal viewing. Set the A/B switch to the "B" position to view scrambled channels. (When you set the A/B switch to "B", you will need to tune your TV to the cable box's output channel, which is usually channel 3 or 4.)

Connecting a DVD Player or Cable Box/Satellite receiver (Set-Top Box) via HDMI

This connection can only be made if there is an HDMI Output connector on the external device.

1. Connect an HDMI Cable between the HDMI IN (1 or 2) jack on the TV and the HDMI jack on the DVD Player or Cable Box/Satellite receiver (Set-Top Box).



➢ What is HDMI?
- HDMI(High-Definition Multimedia Interface), is an interface that enables the transmission of digital audio and video signals using a single cable.
- The difference between HDMI and DVI is that the HDMI device is smaller in size and has the HDCP (High Bandwidth Digital Copy Protection) coding feature installed.

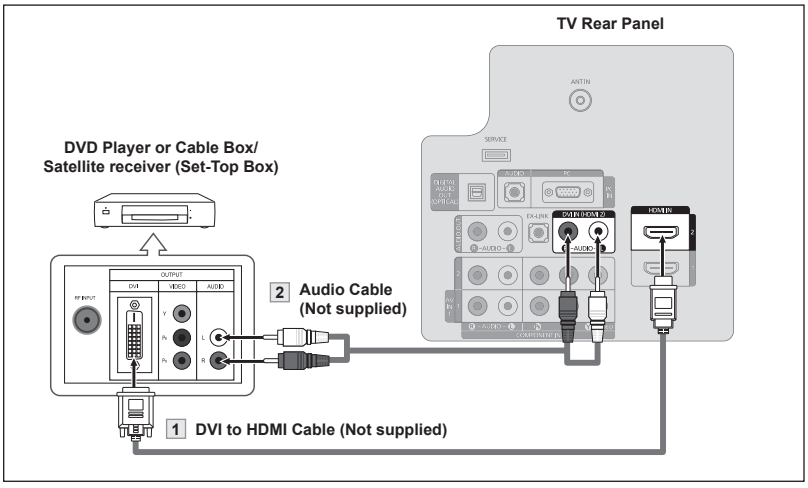
➢ Each DVD Player or Cable Box/Satellite receiver (Set-Top Box) has a different back panel configuration.

Connecting a DVD Player or Cable Box/Satellite receiver (Set-Top Box) via DVI

This connection can only be made if there is a DVI Output connector on the external device.

1. Connect a DVI to HDMI Cable or DVI-HDMI Adapter between the HDMI IN 2 jack on the TV and the DVI jack on the DVD Player or Cable Box/Satellite receiver (Set-Top Box).

2. Connect Audio Cables between the DVI IN (HDMI 2) [R-AUDIO-L] jack on the TV and the DVD Player or Cable Box/Satellite receiver (Set-Top Box).



➢ Each DVD Player or Cable Box/Satellite receiver (Set-Top Box) has a different back panel configuration.

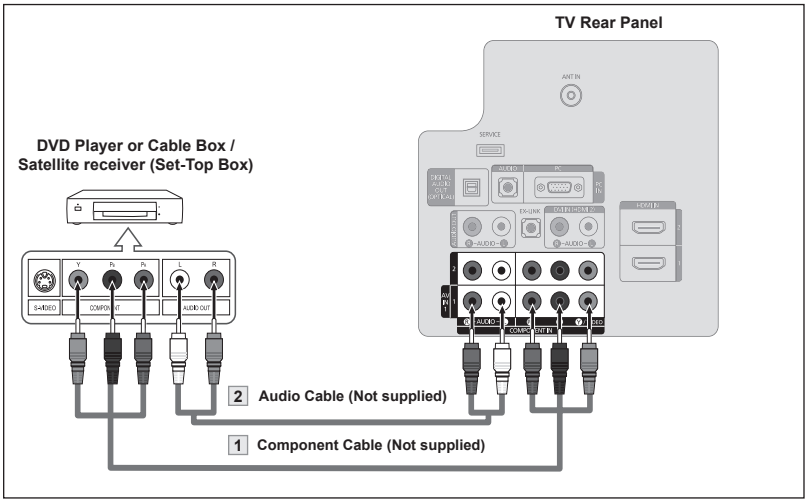
➢ When connecting a DVD Player or Cable Box/Satellite receiver (Set-Top Box), match the color of the connection terminal to the cable.

➢ When using an HDMI/DVI cable connection, you must use the HDMI IN 2 jack.

Connecting a DVD Player or Cable Box/Satellite receiver (Set-Top Box) via Component cables

The rear panel jacks on your TV make it easy to connect a DVD Player or Cable Box/Satellite receiver (Set-Top Box) to your TV.

1. Connect a Component Cable between the COMPONENT IN (1 or 2) [Y, P_B, P_R] jacks on the TV and the COMPONENT [Y, P_B, P_R] jacks on the DVD Player or Cable Box/Satellite receiver (Set-Top Box).
2. Connect Audio Cables between the COMPONENT IN(1 or 2) [R-AUDIO-L] jacks on the TV and the AUDIO OUT jacks on the DVD Player or Cable Box/Satellite receiver (Set-Top Box).

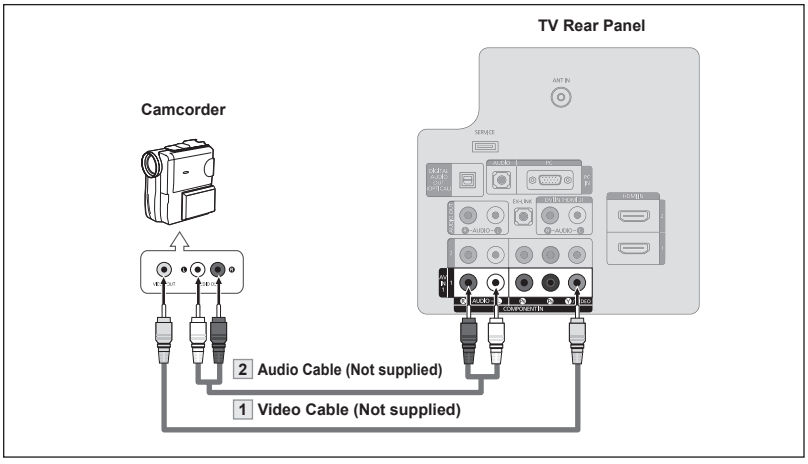


➢ Component video separates the video into Y (Luminance (brightness)), Pb (Blue) and Pr (Red) for enhanced video quality.
Be sure to match the component video and audio connections.
For example, if connecting a Component video cable to COMPONENT IN 1, connect the audio cable to COMPONENT IN 1 also.
➢ Each DVD Player or Cable Box/Satellite receiver (Set-Top Box) has a different back panel configuration.
➢ When connecting a DVD Player or Cable Box/Satellite receiver (Set-Top Box), match the color of the connection terminal to the cable.

Connecting a Camcorder

They allow you to view the camcorder tapes without using a VCR.

1. Connect a Video Cable between the AV IN 1 [Y/VIDEO] jack on the TV and the VIDEO OUT jack on the camcorder.
2. Connect Audio Cables between the AV IN 1 [R-AUDIO-L] jacks on the TV and the AUDIO OUT jacks on the camcorder.



➢ Each Camcorder has a different back panel configuration.
➢ When connecting a Camcorder, match the color of the connection terminal to the cable.
➢ When connecting to AV IN 1, the color of the AV IN 1 [Y/VIDEO] jack (Green) does not match the color of the video cable (Yellow).

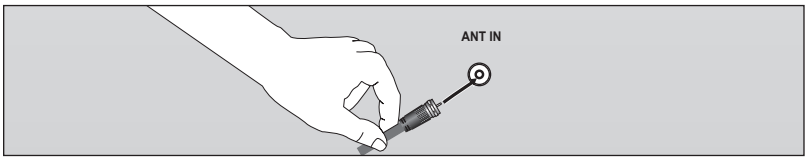
Connecting a VCR

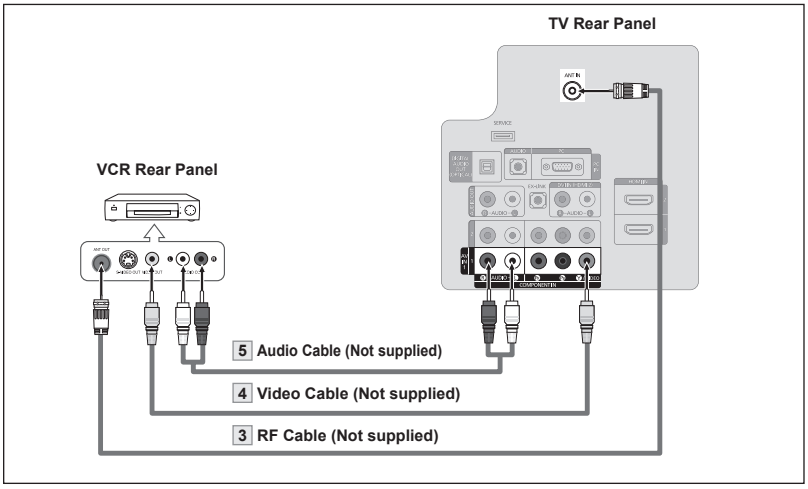
Video Connection

These instructions assume that you have already connected your TV to an antenna or a cable TV system (according to the instructions on pages 6~7). Skip step 1 if you have not yet connected to an antenna or a cable system.

1. Unplug the cable or antenna from the back of the TV.
2. Connect the cable or antenna to the ANT IN terminal on the back of the VCR.
3. Connect an RF Cable between the ANT OUT terminal on the VCR and the ANT IN terminal on the TV.
4. Connect a Video Cable between the VIDEO OUT jack on the VCR and the AV IN 1 [Y/VIDEO] jack on the TV.
5. Connect Audio Cables between the AUDIO OUT jacks on the VCR and the AV IN 1 [R-AUDIO-L] jacks on the TV.

 ➢ If you have a “mono” (non-stereo) VCR, use a Y-connector (not supplied) to connect to the right and left audio input jacks of the TV. Alternatively, connect the cable to the “R” jack. If your VCR is stereo, you must connect two cables.





Follow the instructions in “Viewing a VCR or Camcorder Tape” to view your VCR tape.

➢ Each VCR has a different back panel configuration.

➢ When connecting a VCR, match the color of the connection terminal to the cable.

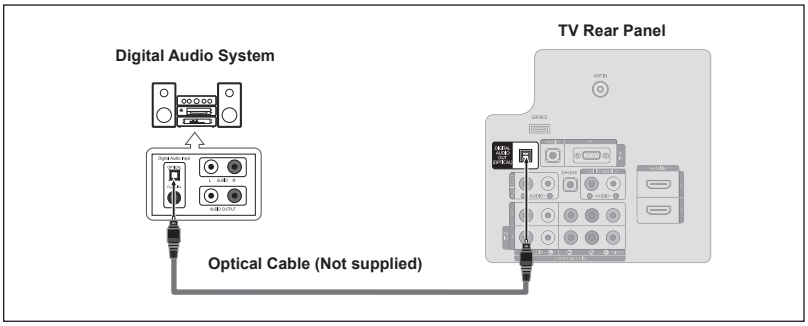
➢ When connecting to AV IN 1, the color of the AV IN 1 [Y/VIDEO] jack (Green) does not match the color of the video cable (Yellow).

Connecting a Digital Audio System

The rear panel jacks on your TV make it easy to connect a Digital Audio System (Home theater/Receiver) to your TV.

1. Connect an Optical Cable between the “DIGITAL AUDIO OUT (OPTICAL)” jacks on the TV and the Digital Audio Input jacks on the Digital Audio System.

When a Digital Audio System is connected to the “DIGITAL AUDIO OUT (OPTICAL)” jack: Decrease the volume of the TV and adjust the volume level with the system’s volume control.



➢ 5.1CH audio is possible when the TV is connected to an external device supporting 5.1CH.

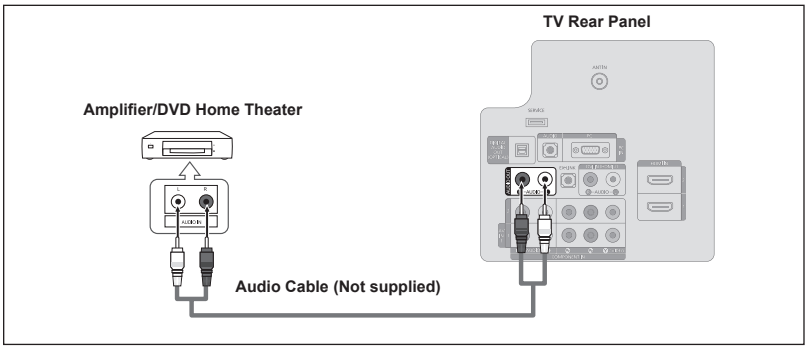
➢ Each Digital Audio System has a different back panel configuration.

➢ When the receiver (home theater) is set to On, you can hear sound output from the TV’s Optical jack. When the TV is displaying a DTV(air) signal, the TV will send out 5.1 channel sound to the Home theater receiver. When the source is a digital component such as a DVD and is connected to the TV via HDMI, only 2 channel sound will be heard from the Home Theater receiver. If you want to hear 5.1 channel audio, connect the DIGITAL AUDIO OUT (OPTICAL) jack on the DVD player or Cable/Satellite Box directly to an Amplifier or Home Theater, not the TV.

Connecting an Amplifier/DVD Home Theater

1. Connect Audio Cables between the AUDIO OUT [R-AUDIO-L] jacks on the TV and AUDIO IN [R-AUDIO-L] jacks on the Amplifier/DVD Home Theater.

When an audio amplifier is connected to the "AUDIO OUT [R-AUDIO-L]" jacks: Decrease the volume of the TV and adjust the volume level with the Amplifier’s volume control.



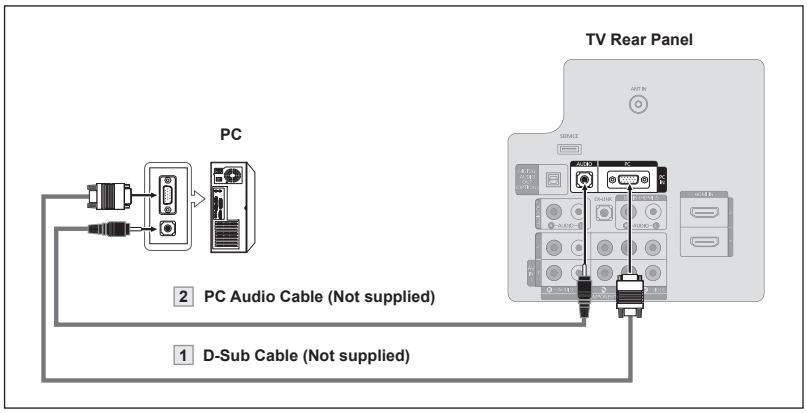
➢ Each Amplifier/DVD Home Theater has a different back panel configuration.

➢ When connecting an Amplifier/DVD Home Theater, match the color of the connection terminal to the cable.

Connecting a PC

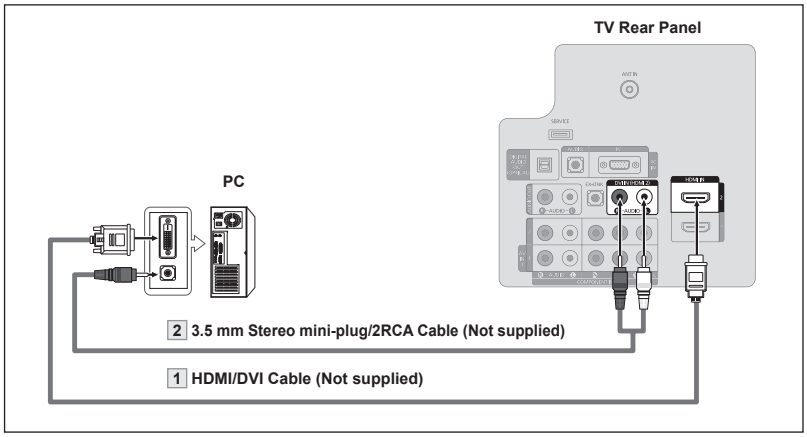
Using the D-Sub Cable

1. Connect a D-Sub Cable between PC IN [PC] connector on the TV and the PC output connector on your computer.
2. Connect a PC Audio Cable between the PC IN [AUDIO] jack on the TV and the Audio Out jack of the sound card on your computer.



Using the HDMI/DVI Cable

1. Connect a HDMI/DVI cable between the HDMI IN 2 jack on the TV and the PC output jack on your computer.
2. Connect a 3.5 mm Stereo mini-plug/2RCA Cable between the DVI IN(HDMI2) [R-AUDIO-L] jack on the TV and the Audio Out jack of the sound card on your computer.



➢ Each PC has a different back panel configuration.
➢ When connecting a PC, match the color of the connection terminal to the cable.
➢ When using an HDMI/DVI cable connection, you must use the HDMI IN 2 jack.

Operation

Turning the TV On and Off

Press the **POWER** ⏻ button on the remote control.

You can also use the **POWER** ⏻ button on the TV.



Plug & Play Feature

When the TV is initially powered on, basic settings proceed automatically and subsequently.

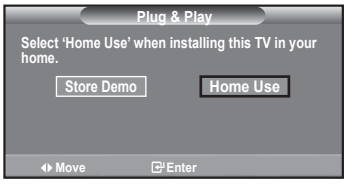
1. Press the **POWER** ⏻ button on the remote control.
The message “Menu Language, Store Demo, Channels and Time will be set.” is displayed.

Press the **ENTER** ↵ button, then “Select the language of the OSD” menu is automatically displayed.





2. Press the ▲ or ▼ button to select language, then press the **ENTER** ↵ button.
The message “Select ‘Home Use’ when installing this TV in your home.” is displayed.



3. Press the ◄ or ► button to select “Store Demo” or “Home Use”, then press the **ENTER** ↵ button.
The message “Select the antennas to memorize.” is displayed.

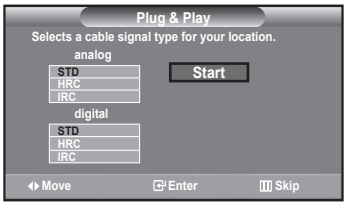
- ➢ We recommend setting the TV to “Home Use” mode for the best picture in your home environment.
- ➢ “Store Demo” mode is only intended for use in retail environments.
- ➢ If the unit is accidentally set to “Store Demo” mode and you want to return to “Home Use” (Standard): Press the Volume button on the TV. When the volume OSD is displayed, press and hold the **MENU** button on the TV for 5 seconds.



4. Press the ▲ or ▼ button to memorize the channels of the selected connection.
Press the **ENTER** ↵ button to select “Start”.

➢ Air: “Air” antenna signal.
Cable: “Cable” antenna signal.
Auto: “Air” and “Cable” antenna signals.

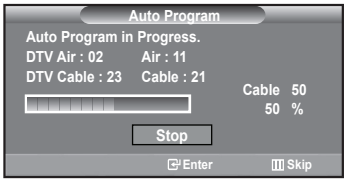
➢ In Cable mode, you can select the correct signal source among STD, HRC, and IRC by pressing the ▲, ▼, ◄ or ► button, then press the **ENTER** ↵ button. If you have Digital cable, select the cable system signal source for both Analog and Digital. Contact your local cable company to identify the type of cable system that exists in your particular area.

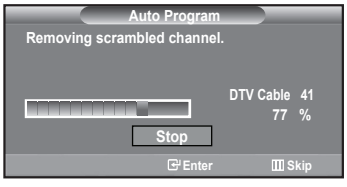


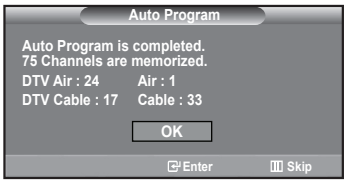
5. The TV will begin memorizing all of the available channels.

➢ To stop the search before it has finished, press the **ENTER** ↵ button with “Stop” selected.

➢ After all the available channels are stored, it starts to remove scrambled channels (see page 28). The Auto program menu then reappears.
Press the **ENTER** ↵ button when channel memorization is complete. The message “Set the Clock Mode.” is displayed.

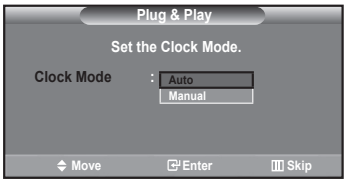






6. Press the **ENTER** ↵ button.
Press the ▲ or ▼ button to select “Auto”, then Press the **ENTER** ↵ button.
The message “Set to daylight saving time.” is displayed.

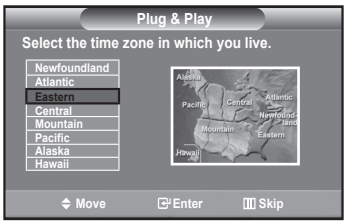
If you select “Manual”, “Enter the current date and time.” is displayed.
(See page 37)



7. Press the ▲ or ▼ button to select “Off” or “On”, then press the **ENTER** ↵ button.
The message “Select the time zone in which you live.” is displayed.



8. Press the ▲ or ▼ button to highlight the time zone for your local area.
Press the **ENTER** ↵ button. If you have received a digital signal, the time will be set automatically.
If not, see page 37 to set the clock.



9. The message “Enjoy your watching.” is displayed.
When you have finished, press the **ENTER** ↵ button.

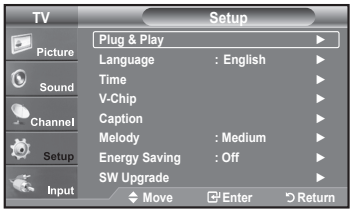


If you want to reset this feature...

1. Press the **MENU** button to display the menu.
Press the ▲ or ▼ button to select "Setup", then press the **ENTER** ↵ button.

2. Press the **ENTER** ↵ button again to select “Plug & Play”.
For further details on setting up options, refer to the pages 13~14.

➢ The “Plug & Play” feature is only available in the TV mode.

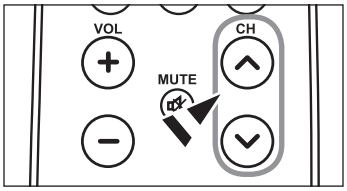


Changing Channels

Using the Channel Buttons

1. Press the **CH**⌃ or **CH**⌄ button to change channels.

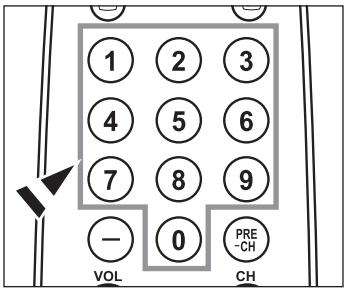
➢ When you press the **CH**⌃ or **CH**⌄ button, the TV changes channels in sequence.
You will see all the channels that the TV has memorized (The TV must have memorized at least three channels). You will not see channels that were either erased or not memorized. See page 16 to memorize channels.



Using the Number Buttons

1. Press the number buttons to go directly to a channel. For example, to select channel **27**, press **2**, then **7**.

➢ For quick channel change, press the number buttons, then press the **ENTER** ↵ button.



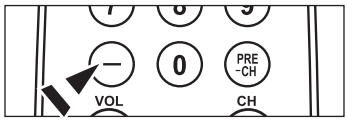
Using the ⊖ Button

The ⊖ button is used to select stations that broadcast a digital signal.

1. For example, for Channel **7-1**, press **7**, then ⊖, then **1**.

➢ HD indicates the TV is receiving a Digital High Definition signal. SD indicates the TV is receiving a Standard Definition signal.

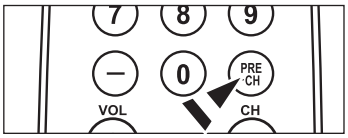
➢ For quick channel change, press the number buttons, then press the **ENTER** ↵ button.



Using the PRE-CH Button to select the Previous Channel

1. Press the **PRE-CH** button.
The TV will switch to the last channel viewed.

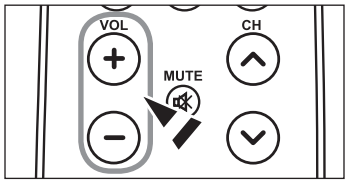
➢ To quickly switch between two channels that are far apart, tune to one channel, then use the number button to select the second channel. Then use the **PRE-CH** button to quickly alternate between them.



Adjusting the Volume

Using the Volume Buttons

1. Press the **VOL**⊖ or **VOL**⊕ button to increase or decrease the volume.

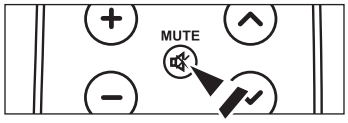


Using the MUTE button

At any time, you can cut off the sound using the **MUTE** button.

1. Press **MUTE** button and the sound cuts off.
"Mute" is displayed on the screen.

2. To turn mute off, press the **MUTE** button again or simply press the **VOL**⊖ or **VOL**⊕ button.



Viewing the Display

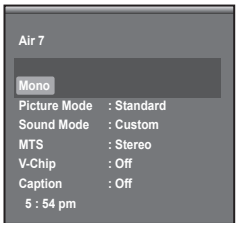
The display identifies the current channel and the status of certain audio-video settings.

1. Press the **INFO** button on the remote control.

The TV will display the channel, the type of sound, and the status of certain picture and sound settings.

➢ Press the **INFO** button once more or wait approximately 10 seconds and the display disappears automatically.





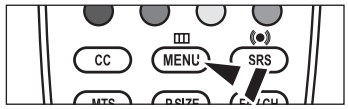
Viewing the Menus

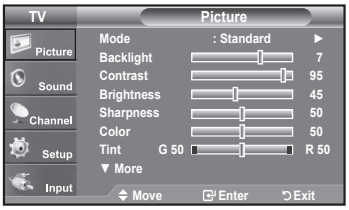
1. With the power on, press the **MENU** button.
The main menu appears on the screen. The menu's left side has icons: Picture, Sound, Channel, Setup, Input.

2. Press the ▲ or ▼ button to select one of the icons.
Then press the **ENTER** ↵ button to access the icon's sub-menu.

3. Press the **EXIT** button to exit.

➢ The on-screen menus disappear from the screen after about one minute.



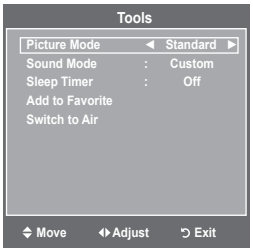


Using the TOOLS Button

You can use the **Tools** button to select your frequently used functions quickly and easily. The “Tools” menu changes depending on which external input mode you are viewing.



1. Press the **TOOLS** button.
 The “Tools” menu will appear.
2. Press the ▲ or ▼ button to select a menu.
3. Press the ▲/▼/◄/►/**ENTER** ☞ buttons to display, change, or use the selected items.For a more detailed description of each function, refer to the corresponding page.



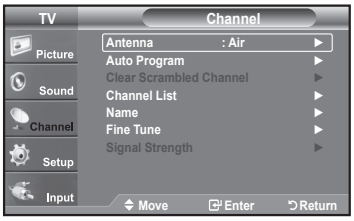
- Picture Mode, see page 19
- Sound Mode, see page 24
- Sleep Timer, see page 39
- Add to Favorite, see page 30
- Switch to Air, see page 16
- Auto Adjustment, see page 35

Memorizing the Channels

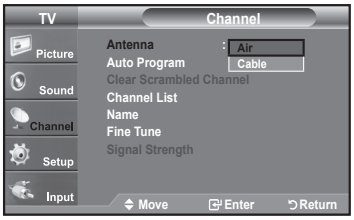
Your TV can memorize and store all of the available channels for both "off-air" (Air) and "Cable" channels. After the available channels are memorized, use the **CH**⌃ or **CH**⌄ button to scan through the channels. This eliminates the need to change channels by entering the channel digits. There are three steps for memorizing channels: selecting a broadcast source, memorizing the channels (automatic) and adding or deleting channels (Channel Lists).

Selecting the Video Signal-source

Before your television can begin memorizing the available channels, you must specify the type of signal source that is connected to the TV (i.e. an Air or a Cable system).

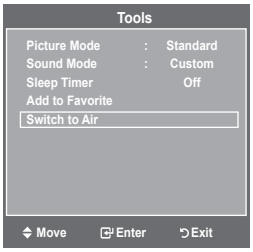


1. Press the **MENU** button to display the menu.
 Press the ▲ or ▼ button to select "Channel", then press the **ENTER** ☞ button.



2. Press the **ENTER** ☞ button to select “Antenna”.
 Press the ▲ or ▼ button to select “Air” or “Cable”, then press the **ENTER** ☞ button.
 Press the **EXIT** button to exit.

Easy Setting

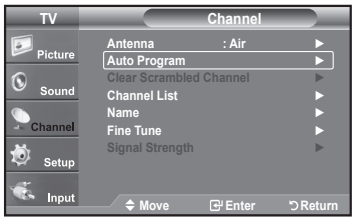


1. Press the **TOOLS** button on the remote control.
2. Press the ▲ or ▼ button to select “Switch to Air” (or “Switch to Cable”), then press the **ENTER** ☞ button.

Storing Channels in Memory (Automatic Method)

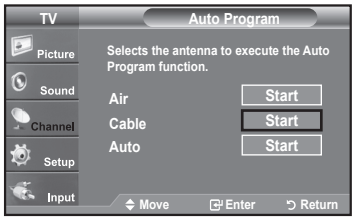
1. Press the **MENU** button to display the menu.
Press the ▲ or ▼ button to select “Channel”, then press the **ENTER** ↵ button.

2. Press the ▲ or ▼ button to select "Auto Program", then press the **ENTER** ↵ button.



3. Press the ▲ or ▼ button to select the antenna connection, then press the **ENTER** ↵ button.

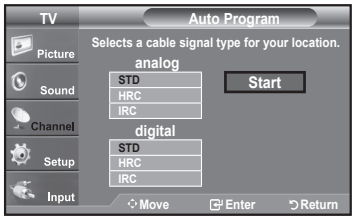
➢ Air: “Air” antenna signal.
Cable: “Cable” antenna signal.
Auto: “Air” and “Cable” antenna signals.



4. When selecting the Cable TV system:
Press the **ENTER** ↵ button to start the auto program.

Press the ◄ or ► button, then press the ▲ or ▼ to select the correct analog signal cable system source among “STD”, “HRC”, and “IRC”. Press the **ENTER** ↵ button. If you have Digital cable TV, select the cable system signal source for both Analog and Digital.

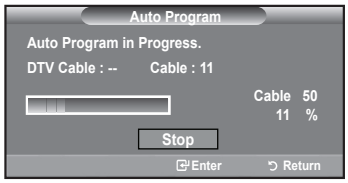
➢ STD, HRC and IRC identify various types of cable TV systems. Contact your local cable company to identify the type of cable system that exists in your particular area. At this point the signal source has been selected.

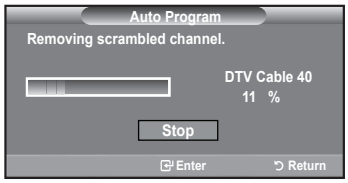


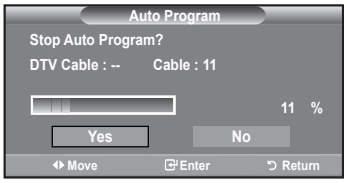
5. The TV begins memorizing all available stations.
After all the available channels are stored, it start to remove scrambled channels(see page 28).

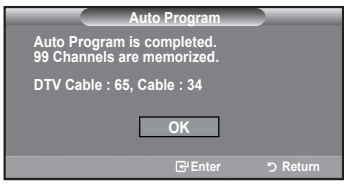
➢ If you want to stop Auto Programming, press the **ENTER** ↵ button. The “Stop Auto Program?” message will be displayed. Select “Yes” by pressing the ◄ or ► button, then press the **ENTER** ↵ button.

Press the **EXIT** button to exit.



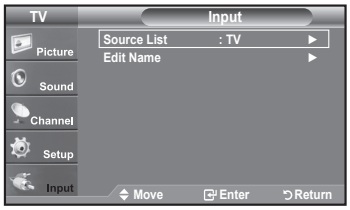




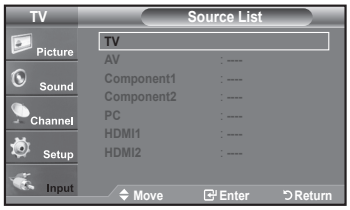


To Select the Source

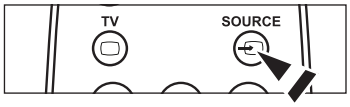
Use to select TV or other external input sources such as DVD players or Cable Box/ Satellite receivers (Set-Top Box) connected to the TV. Use to select the input source of your choice.



1. Press the **MENU** button to display the menu.
 Press the▲ or ▼ button to select “Input”, then press the **ENTER** ↵ button.
2. Press the **ENTER** ↵ button to select "Source List".
 Press the ▲ or ▼ button to select signal source, then press the **ENTER** ↵ button.
 - ➢ Available signal sources: TV, AV, Component1, Component2, PC, HDMI1, HDMI2.
 - ➢ You can choose only those external devices that are connected to the TV.



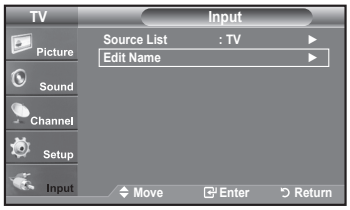
Press the **SOURCE** button on the remote control to view an external signal source.



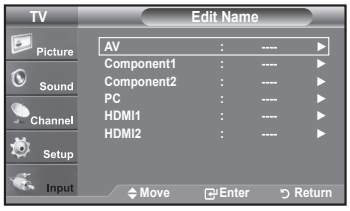
To Edit the Input Source Name

Name the device connected to the input jacks to make your input source selection easier.

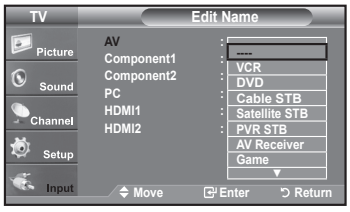
1. Press the **MENU** button to display the menu.
 Press the▲ or ▼ button to select “Input”, then press the **ENTER** ↵ button.
 Press the ▲ or ▼ button to select "Edit Name", then press the **ENTER** ↵ button.



2. Press the ▲ or ▼ button to select "AV", "Component1", "Component2", "PC", "HDMI1", "HDMI2" input jack, then press the **ENTER** ↵ button.



3. Press the ▲ or ▼ button to select “VCR”, “DVD”, “Cable STB”, “Satellite STB”, “PVR STB”, “AV Receiver”, “Game”, “Camcorder”, “PC”, “TV”, “IPTV”, “Blu-Ray”, “HD DVD”, “Digital Media Adapter” input source, then press the **ENTER** ↵ button.
 Press the **EXIT** button to exit.

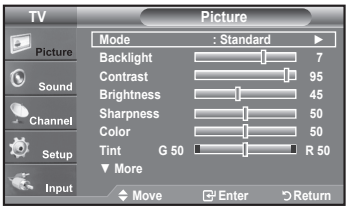


Picture Control

Changing the Picture Standard

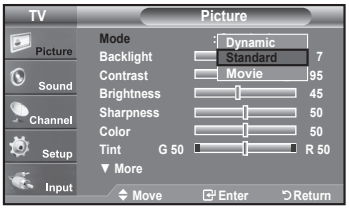
You can activate either Dynamic, Standard, Movie by making a selection from the menu.

1. Press the **MENU** button to display the menu.
Press the **ENTER** ↵ button, to select “Picture”.



2. Press the **ENTER** ↵ button to select "Mode".
Press the ▲ or ▼ button to select the “Dynamic”, “Standard” or “Movie”.

- **Dynamic**: Selects the picture for high-definition in a bright room.
- **Standard**: Selects the picture for the optimum display in a normal environment.
- **Movie**: Selects the picture for viewing movies in a dark room.



3. Press the **EXIT** button to exit.

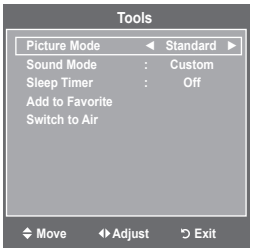
Easy Setting

1. Press the **TOOLS** button on the remote control.

2. Press the ▲ or ▼ button to select “Picture Mode”.

3. Press the ◄ or ►button to select the required option.

4. Press the **EXIT** or **TOOLS** button to exit.



Customizing the Picture Settings

Your television has several setting options that allow you to control the picture quality.

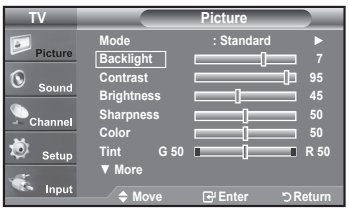
1. To select the desired picture mode, follow the “Changing the Picture Standard” instructions numbers 1 and 2.

2. Press the ▲ or ▼ button to select “Backlight”, “Contrast”, “Brightness”, “Sharpness”, “Color” or “Tint”, then press the **ENTER** ↵ button.

3. Press the ◄ or ► button to decrease or increase the value of a particular item.
Press the **ENTER** ↵ button.

Press the **EXIT** button to exit.

- ➢ When you make changes to “Backlight”, “Contrast”, “Brightness”, “Sharpness”, “Color” or “Tint”, the OSD will be adjusted accordingly.
- ➢ In PC mode, you can only make changes to “Backlight”, “Contrast” and “Brightness”.
- ➢ Settings can be adjusted and stored for each external device you have connected to an input of the TV.
- ➢ The energy consumed during use can be significantly reduced if the level of brightness of the picture is reduced, and that this will reduce the overall running cost.



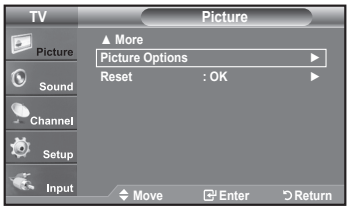


- **Backlight**: Adjusts the brightness of LCD back light.
- **Contrast**: Adjusts the contrast level of the picture.
- **Brightness**: Adjusts the brightness level of the picture.
- **Sharpness**: Adjusts the edge definition of the picture.
- **Color**: Adjusts color saturation of the picture.
- **Tint**: Adjusts the color tint of the picture.

Configuring Picture Options

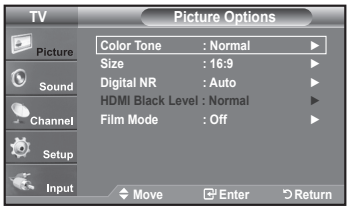
Activating Picture Options

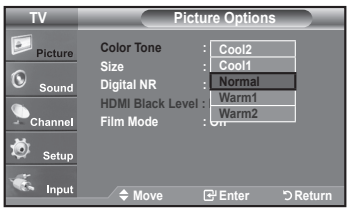
1. Press the **MENU** button to display the menu.
 Press the **ENTER** button, to select “Picture”.
2. Press the ▲ or ▼ button to select "Picture Options", then press the **ENTER** button.
 - ➢ Press the ▲ or ▼ button to select a particular item. Press the **ENTER** button.
 - ➢ When you are satisfied with your setting, press the **ENTER** button.
 - ➢ In PC mode, you can only make changes to the “Color Tone” and “Size” from among the items in “Picture Options”.



Setting the Color Tone

1. Follow the “Activating Picture Options” instructions numbers 1 and 2. (Refer to page 20)
2. Press the ▲ or ▼ button to select “Color Tone”, then press the **ENTER** button.
3. Press the ▲ or ▼ button to select “Cool2”, “Cool1”, “Normal”, “Warm1” or “Warm2”. Press the **ENTER** button.
 - ➢ “Warm1” or “Warm2” is only activated when the picture mode is “Movie”.
 - ➢ Settings can be adjusted and stored for each external device you have connected to an input of the TV.





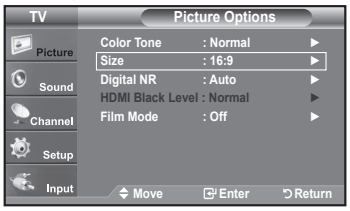
Setting the Screen Size

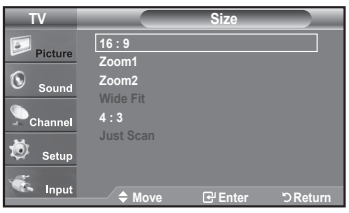
Occasionally, you may want to change the size of the image on your screen. Your TV comes with six screen size options, each designed to work best with specific types of video input. Your cable box or satellite receiver may have its own set of screen sizes as well. In general, though, you should view the TV in 16:9 mode as much as possible.

1. Follow the “Activating Picture Options” instructions numbers 1 and 2. (Refer to page 20)
2. Press the ▲ or ▼ button to select “Size”, then press the **ENTER** button.
3. Press the ▲ or ▼ button to select the screen format you want.
 Press the **ENTER** button.

 Press the **EXIT** button to exit.

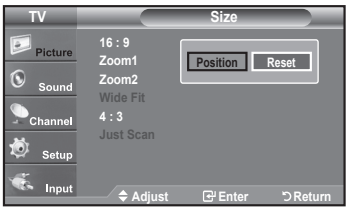
- **16:9**: Sets the picture to 16:9 wide mode.
- **Zoom1**: Magnifies the size of the picture on the screen.
- **Zoom2**: Magnifies the size of the picture more than “Zoom1”.
- **Wide Fit**: Enlarges the aspect ratio of the picture to fit the entire screen.
- **4:3**: Sets the picture to 4:3 normal mode.
- **Just Scan**: Use the function to see the full image without any cutoff when HDMI (720p/1080i), Component (1080i) or DTV (1080i) signals are input.



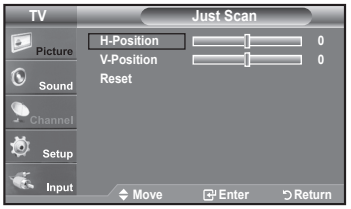


➢ Temporary image retention may occur when viewing a static image on the set for more than two hours.

➢ **After selecting "Zoom1", "Zoom2" or "Wide Fit"**:
Press the ◄ or ► button to select "Position", then press the **ENTER** ↵ button.
Press the ▲ or ▼ button to move the picture up and down.
Reset: Press the ◄ or ► button to select "Reset", then press the **ENTER** ↵ button. You can initialize the setting.



➢ **After selecting "Just Scan" in HDMI (1080i) or Component (1080i) mode:**
Press the ▲ or ▼ button to select "H-Position" or "V-Position", then press the **ENTER** button.
Press the ◄ or ► button to adjust the screen Position. Press the **ENTER** ↵ button.
Reset: Press the ▲ or ▼ button to select "Reset", then press the **ENTER** ↵ button. You can initialize the setting.

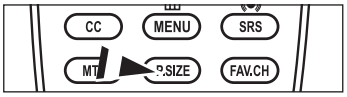


➢ HD (High Definition)
16:9 - 1080i (1920x1080), 720p (1280x720)

➢ Settings can be adjusted and stored for each external device you have connected to an input of the TV.

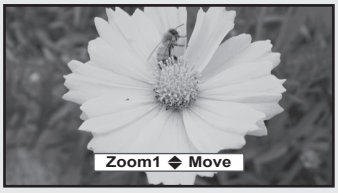
Input Source	Picture Size
TV, Video, Component (480i, 480p)	16:9, Zoom1, Zoom2, 4:3
DTV(1080i), Component (1080i), HDMI (720p, 1080i)	16:9, 4:3, Wide Fit, Just Scan
PC	16:9, 4:3

Alternately, you can press the **P.SIZE** button on the remote control repeatedly to change the picture size.





16:9
Sets the picture to 16:9 wide mode.



Zoom1
Magnifies the size of the picture on the screen.



Zoom2
Magnifies the size of the picture more than "Zoom1".



Wide Fit
Enlarges the aspect ratio of the picture to fit the entire screen.



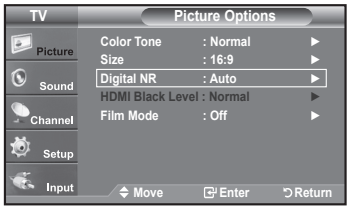
4:3
Sets the picture to 4:3 normal mode.

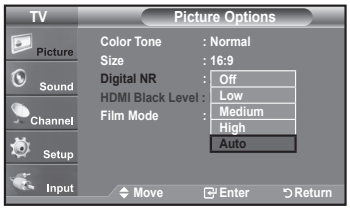


Just Scan
Use the function to see the full image without any cutoff when HDMI (720p/1080i), Component (1080i) or DTV (1080i) signals are input.

Setting the Digital Noise Reduction

If the broadcast signal received by your TV is weak, you can activate the Digital Noise Reduction feature to help reduce any static and ghosting that may appear on the screen.





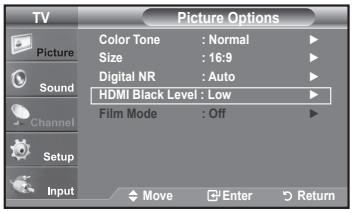
1. Follow the “Activating Picture Options” instructions numbers 1 and 2. (Refer to page 20)
2. Press the ▲ or ▼ button to select "Digital NR", then press the **ENTER** ↵ button.
3. Press the ▲ or ▼ button to select "Off", "Low", "Medium", "High" or "Auto". Press the **ENTER** ↵ button.

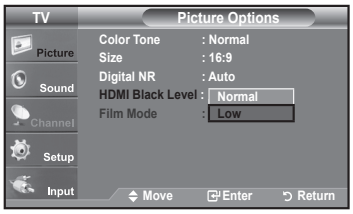
- **Off:** Turns the screen noise reduction function off.
- **Low:** Reduces screen noise at a low level.
- **Medium:** Reduces screen noise at a medium level.
- **High:** Reduces screen noise at a high level.
- **Auto:** Automatically recognizes and reduces screen noise.

Press the **EXIT** button to exit.

Setting the HDMI Black Level

You can select the black level on the screen to adjust the screen depth.





1. Follow the “Activating Picture Options” instructions numbers 1 and 2. (Refer to page 20)
2. Press the ▲ or ▼ button to select “HDMI Black Level”, then press the **ENTER** ↵ button.
3. Press the ▲ or ▼ button to select “Normal” or “Low”, then press the **ENTER** ↵ button.

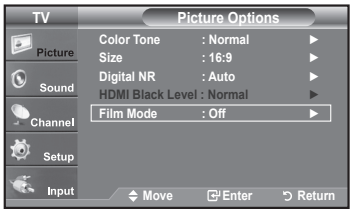
- **Normal:** The screen gets brighter.
- **Low:** The screen gets darker.

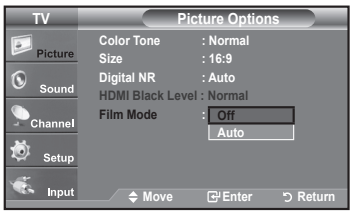
➢ This function is active only when the external input connects to HDMI (RGB signals). “HDMI Black Level” function may not be compatible with or external devices.

Press the **EXIT** button to exit.

Setting the Film Mode

The TV can be set to automatically sense and process film signals from all sources and adjust the picture for optimum quality.





1. Follow the “Activating Picture Options” instructions numbers 1 and 2. (Refer to page 20)
2. Press the ▲ or ▼ button to select "Film Mode", then press the **ENTER** ↵ button.
3. Press the ▲ or ▼ button to select "Off" or "Auto", then press the **ENTER** ↵ button.

Press the **EXIT** button to exit.

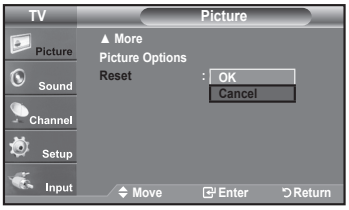
➢ "Film mode" is supported in TV, VIDEO,COMPONENT(480i / 1080i) and HDMI(480i / 1080i).

Resetting the Picture Settings to the Factory Defaults

1. Press the **MENU** button to display the menu.
 Press the **ENTER** ↵ button, to select “Picture”.
2. Press the ▲ or ▼ button to select "Reset", then press the **ENTER** ↵ button.
 Press the ▲ or ▼ button to select “OK” or “Cancel” then press the **ENTER** ↵ button.

 Press the **EXIT** button to exit.

 ➢ Each mode can be reset.

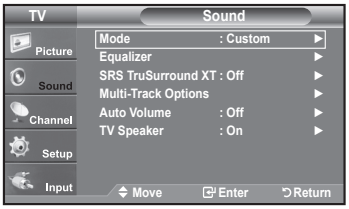


Sound Control

Changing the Sound Standard

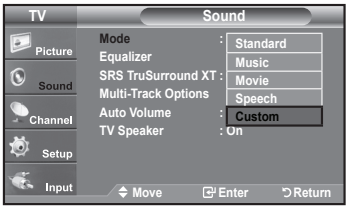
You can select the sound mode to best suit the programming you're watching.

1. Press the **MENU** button to display the menu.
Press the ▲ or ▼ button to select "Sound", then press the **ENTER** ↵ button.



2. Press the **ENTER** ↵ button to select "Mode".
Press the ▲ or ▼ button to select "Standard", "Music", "Movie", "Speech", or "Custom" sound setting, then press the **ENTER** ↵ button.

Press the **EXIT** button to exit.



- **Standard**: selects the normal sound mode.
- **Music**: emphasizes music over voices.
- **Movie**: provides the best sound for movies
- **Speech**: emphasizes voice over other sounds.
- **Custom**: recalls your customized sound settings. (see "Customizing the Sound")

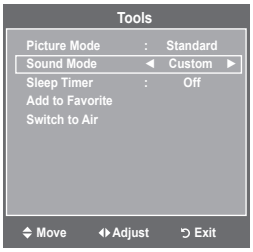
Easy Setting

1. Press the **TOOLS** button on the remote control.

2. Press the ▲ or ▼ button to select "Sound Mode".

3. Press the ◄ or ►button to select the required option.

4. Press the **EXIT** or **TOOLS** button to exit.

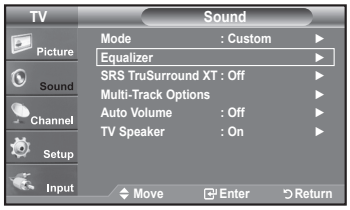


Customizing the Sound

The sound settings can be adjusted to suit your personal preference.

1. Press the **MENU** button to display the menu.
Press the ▲ or ▼ button to select "Sound", then press the **ENTER** ↵ button.

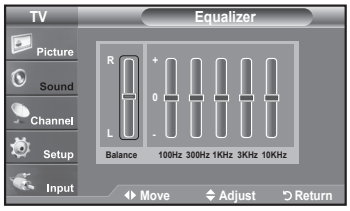
2. Press the ▲ or ▼ button to select "Equalizer", then press the **ENTER** ↵ button.



3. Press the ◄ or ► button to select a particular frequency to adjust.
Press the ▲ or ▼ button to increase or decrease the level of the particular frequency.

Press the **ENTER** ↵ button.

Press the **EXIT** button to exit.



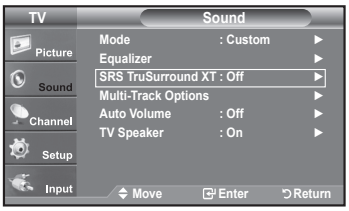
- **L/R Sound Balance Adjustment**: To adjust the sound balance of the L/R speakers.
- **Bandwidth Adjustment (100Hz, 300Hz, 1KHz, 3KHz, 10KHz):** To adjust the level of different bandwidth frequencies.

➢ If you make any changes to the "Equalizer" settings, the sound mode is automatically switched to the "Custom" mode.

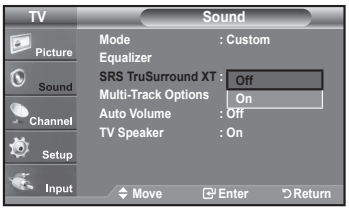
Setting the TruSurround XT

TruSurround XT is a patented SRS technology that solves the problem of playing 5.1 multichannel content over two speakers. TruSurround delivers a compelling, virtual surround sound experience through any two-speaker playback system, including internal television speakers. It is fully compatible with all multichannel formats.

1. Press the **MENU** button to display the menu.
 Press the ▲ or ▼ button to select "Sound", then press the **ENTER** ↵ button.
2. Press the ▲ or ▼ button to select "SRS TruSurround XT", then press the **ENTER** ↵ button.

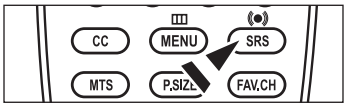


3. Press the ▲ or ▼ button to select "Off" or "On", then press the **ENTER** ↵ button.
 Press the **EXIT** button to exit.



TruSurround XT, SRS and (●) Symbol are trademarks of SRS Labs, Inc.
TruSurround XT technology is incorporated under license from SRS Labs, Inc.

Press the **SRS** button on the remote control to select "Off" or "On".



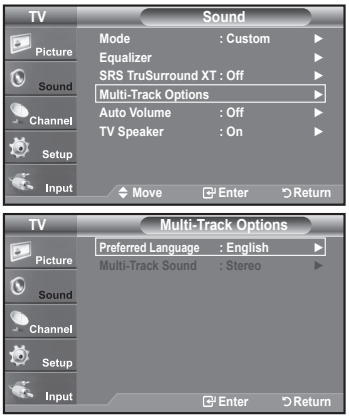
Choosing a Multi-Channel Sound (MTS) track - Digital

The digital-TV transmission system is capable of simultaneous transmission of many audio tracks (for example, simultaneous translations of the program into foreign languages). The availability of these additional “multitracks” depends upon the program.

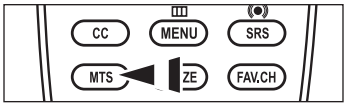
➢ "Multi-Track Options" is available only in TV mode.

Preferred Language

1. Press the **MENU** button to display the menu.
 Press the ▲ or ▼ button to select "Sound", then press the **ENTER** ↵ button.
 ➢ Quick way to access the MTS menu: Just press the “MTS” button on the remote control. You can listen in a language other than your chosen language by pressing the MTS button.
2. Press the ▲ or ▼ button to select “Multi-Track Options", then press the **ENTER** ↵ button.
3. Press the **ENTER** ↵ button to select “Preferred Language”.
 Press the ▲ or ▼ button to choose the language (English, Spanish or French) you want, then press the **ENTER** ↵ button.
 Press the **EXIT** button to exit.
 ➢ “Preferred Language” is available only in Digital TV mode.
 ➢ You can only select the language from among the actual languages being broadcast.

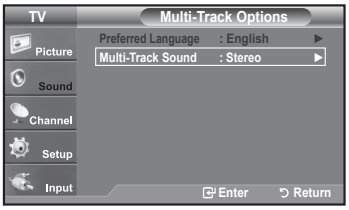


You can listen in a language other than the Preferred language by pressing the **MTS** button on the remote control.

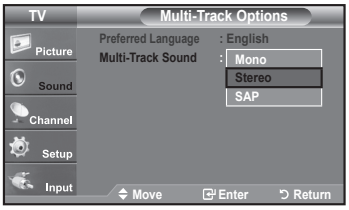


Choosing a Multi-Channel Sound (MTS) track - Analog

Multi-Track Sound



1. Press the **MENU** button to display the menu.
 Press the ▲ or ▼ button to select "Sound", then press the **ENTER** ↵ button.
2. Press the ▲ or ▼ button to select "Multi-Track Options", then press the **ENTER** ↵ button.

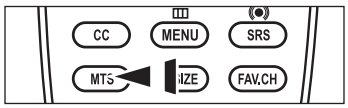


3. Press the ▲ or ▼ button to select “Multi-Track Sound”, then press the **ENTER** ↵ button.
 Press the ▲ or ▼ button to select a setting you want, then press the **ENTER** ↵ button.
 Press the **EXIT** button to exit.

- **Mono**: Choose for channels that are broadcasting in mono or if you are having difficulty receiving a stereo signal.
- **Stereo**: Choose for channels that are broadcasting in stereo.
- **SAP**: Choose to listen to the Separate Audio Program, which is usually a foreign-language translation.

➢ “Multi-Track Sound” is available only in Analog TV mode.
➢ Depending on the particular program being broadcast, you can listen to “Mono”, “Stereo” or “SAP”.

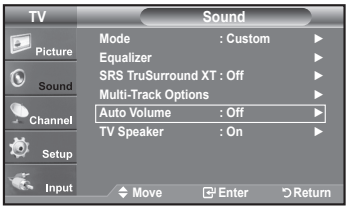
Press the **MTS** buttons on the remote control repeatedly to select “Mono”, “Stereo” or “SAP”.



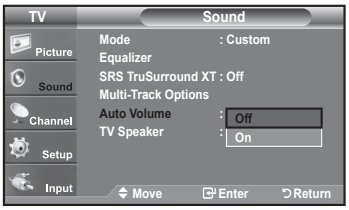
Automatic Volume Control

Reduces the differences in volume level among broadcasters.

1. Press the **MENU** button to display the menu.
 Press the ▲ or ▼ button to select "Sound", then press the **ENTER** ↵ button.
2. Press the ▲ or ▼ button to select "Auto Volume", then press the **ENTER** ↵ button.



3. Press the ▲ or ▼ button to set Auto Volume "Off" or "On" then press the **ENTER** ↵ button.
 Press the **EXIT** button to exit.

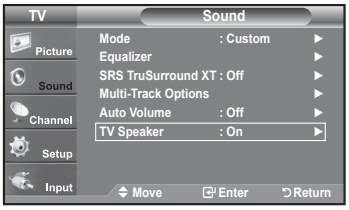


Setting the TV Speakers On/Off

Sound output from the TV speakers is muted.

1. Press the **MENU** button to display the menu.
Press the ▲ or ▼ button to select "Sound", then press the **ENTER** ↵ button.

2. Press the ▲ or ▼ button to select "TV Speaker", then press the **ENTER** ↵ button.

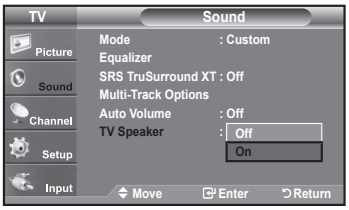


3. Press the ▲ or ▼ button to select “Off”, then press the **ENTER** ↵ button.

Press the **EXIT** button to exit.

➢ When “TV Speaker” is set to “Off”, Sound menus except “Multi-Track Options” cannot be adjusted.

➢ The **VOL**⊕, **VOL**⊖ and **MUTE** buttons do not operate when the "TV Speaker" is set to “Off”.



	TV's Internal Speakers			Audio Out (Optical, L/R Out) to Sound System		
	RF	AV	Component, PC, HDMI	RF	AV	Component, PC, HDMI
TV Speaker On	Speaker Output	Speaker Output	Speaker Output	Sound Output	Sound Output	Sound Output
TV Speaker Off	Mute	Mute	Mute	Sound Output	Sound Output	Sound Output
Video No Signal	Mute	Mute	Mute	Mute	Mute	Mute

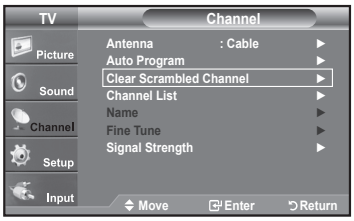
DOLBY DIGITAL

Manufactured under license from Dolby Laboratories. Dolby and the double-D symbol are trademarks of Dolby Laboratories.

Clearing Scrambled Channels - Digital

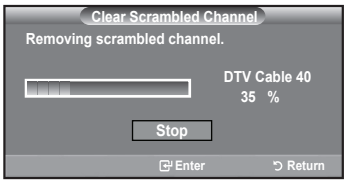
The Clear Scrambled Channel function is used to filter out scrambled channels after Auto Program is completed.
This process may take up to 20~30 minutes.

1. Press the **MENU** button to display the menu.
Press the ▲ or ▼ button to select "Channel", then press the **ENTER** ↵ button.



2. Press the ▲ or ▼ button to select "Clear Scrambled Channel", then press the **ENTER** ↵ button.
It searches scrambled channels, which are to be removed from the list.

➢ **To stop searching scrambled channels:**
Press the **ENTER** ↵ button to select Stop.
Press the ◄ button to select "Yes", then press the **ENTER** ↵ button.



3. When the scrambled channel searching is completed, press the **ENTER** ↵ button.

Press the **EXIT** button to exit.

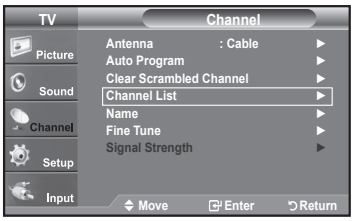
➢ This function is only available in “Cable” mode.

Adding and Erasing Channels

Using this menu, you can Add/Delete or set Favorite channels and use the program guide for digital broadcasts.
To use the Channel List function, first run “Auto Program” (see page 17).

1. Press the **MENU** button to display the menu.
Press the ▲ or ▼ button to select "Channel", then press the **ENTER** ↵ button.

2. Press the ▲ or ▼ button to select "Channel List", then press the **ENTER** ↵ button.



3. Press the **ENTER** ↵ button to select “All”.

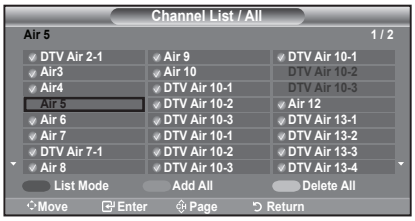


4. Press the ◄, ►, ▲ or ▼ button to select a channel to delete, then press the **ENTER** ↵ button.

Press the ▲ or ▼ button to select “Delete”, then press the **ENTER** ↵ button to delete the channel.

The ✓ mark will disappear.





5. Press the ◄, ►, ▲ or ▼ button to select a channel to add, then press the **ENTER** ↵ button.

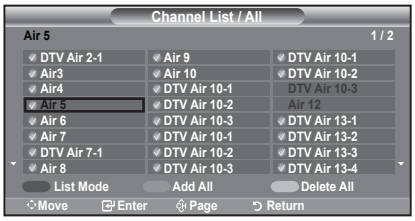
Press the ▲ or ▼ button to select “Add”, then press the **ENTER** ↵ button to add the channel.

The ✓ mark will appear and the channel will be added.

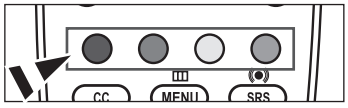
Press the **EXIT** button to exit.

➢ All selected channels will be shown on “Added" menu.





- **Red button:** Press repeatedly to select “All”, “Added” or “Favorite”.
- **Green button:** Press to add all deleted channels.
- **Yellow button:** Press to delete all memorized channels.

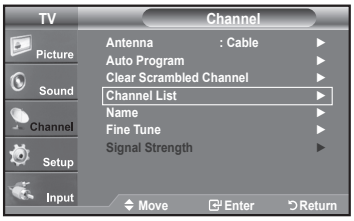


To Set-Up Your Favorite Channels

You can set channels you watch frequently as favorites.

1. Press the **MENU** button to display the menu.
Press the ▲ or ▼ button to select "Channel", then press the **ENTER** ↵ button.

2. Press the ▲ or ▼ button to select "Channel List", then press the **ENTER** ↵ button.



3. Press the ▲ or ▼ button to select "All" or "Added", then press the **ENTER** ↵ button.



4. Press the ◄, ►, ▲ or ▼ button to select your favorite channels to watch among the labeled channels. Then press the **ENTER** ↵ button.

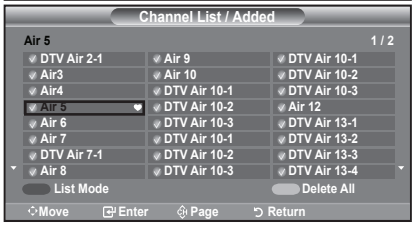
Press the ▲ or ▼ button to select “Favorite”, then press the **ENTER** ↵ button.

The " ♥ " symbol will be highlighted and the channel will be set as a Favorite. To cancel your Favorite channel selection, press the **ENTER** ↵ button until the " ♥ " symbol is no longer highlighted.

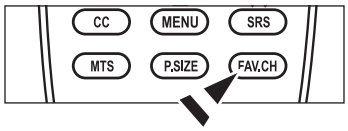
Press the **EXIT** button to exit.

➢ Only memorized channels can be set as favorite channels.
➢ All favorite channels will be shown in the “Favorite” menu.





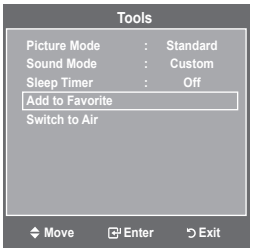
To select the favorite channels you have set up, press the **FAV.CH** button on the remote control.



Easy Setting

1. Press the **TOOLS** button on the remote control.

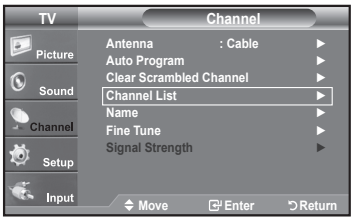
2. Press the ▲ or ▼ button to select “Add to Favorite” (or “Delete from Favorite”), then press the **ENTER** ↵ button.
➢ The current channel is added to (or deleted from) Favorites.



Viewing the Channel Lists

You can display a list of all channels, added channels or your favorite channels.

1. Press the **MENU** button to display the menu.
 Press the ▲ or ▼ button to select "Channel", then press the **ENTER** ↵ button.
2. Press the ▲ or ▼ button to select "Channel List", then press the **ENTER** ↵ button.

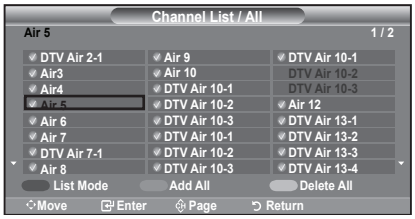


3. Press the ▲ or ▼ button to select “All”, “Added” or “Favorite”, then press the **ENTER** ↵ button.



4. Press the ▲ or ▼ button to select “Channel”, then press the **ENTER** ↵ button.
 To toggle between your all channels, add channels or favorite channels, use the Red button on the remote control.

 • **Red button:** Press repeatedly to select “All”, “Added” or “Favorite”

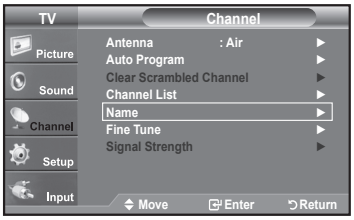




Labeling Channels

Channels can be labeled so that their call letters appear whenever the channel is selected.

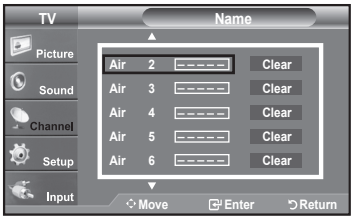
1. Press the **MENU** button to display the menu.
Press the ▲ or ▼ button to select “Channel”, then press the **ENTER** ↵ button.
Press the ▲ or ▼ button to select “Name”, then press the **ENTER** ↵ button.

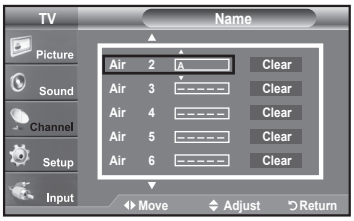


2. Press the ▲ or ▼ button to select the channel to be assigned a new name, then press the **ENTER** ↵ button.
Press the ▲ or ▼ button to select a letter, a number or a blank (Results in this sequence: A...Z, 0...9, +, -, *, /, blank).
Press the ► button to switch to the next field, which will be selected.
Select a second letter or digit by pressing the ▲ or ▼ button, as above.
Repeat the process to select the last three digits. When you have finished, press the **ENTER** ↵ button to assign the new name.
To erase the assigned new name, select "Clear" by pressing the ◄ or ► button, then press the **ENTER** ↵ button.

Press the **EXIT** button to exit.

➢ The names of digital broadcasting channels are automatically assigned and cannot be labelled.

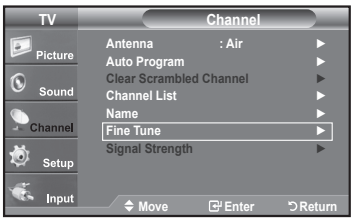




Fine Tuning Analog Channels

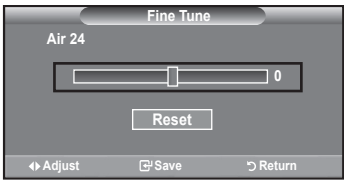
Use fine tuning to manually adjust a particular channel for optimal reception.

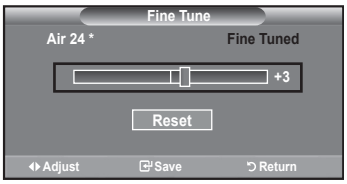
1. Press the **MENU** button to display the menu.
 Press the ▲ or ▼ button to select "Channel", then press the **ENTER** ☞ button.
2. Press the ▲ or ▼ button to select "Fine Tune", then press the **ENTER** ☞ button.

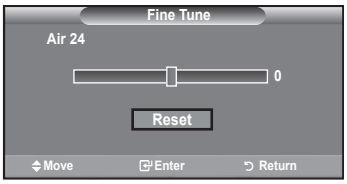


3. Press the ◄ or ► button to adjust the fine tuning.
 To store the fine tuning setting in the TV's memory, press the **ENTER** ☞ button.
 ➢ If you do not store the fine-tuned channel in memory, adjustments are not saved.
4. To reset the fine tuning setting, press the ▼ button to select "Reset", then press the **ENTER** ☞ button.

 Press the **EXIT** button to exit.
 ➢ "*****" will appear next to the name of fine-tuned channels.
 ➢ Only analog TV channels can be fine tuned.





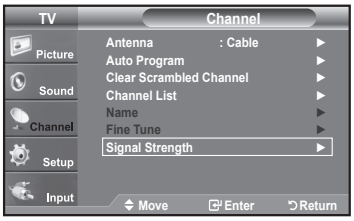


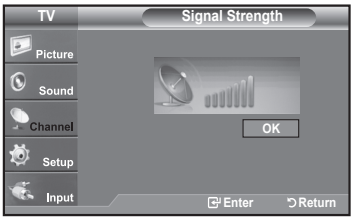
Checking the Digital-Signal Strength

Unlike analog channels, which can vary in reception quality from "snowy" to clear, digital (HDTV) channels have either perfect reception quality or you will not receive them at all. So, unlike analog channels, you cannot fine tune a digital channel. You can, however, adjust your antenna to improve the reception of available digital channels.

1. Press the **MENU** button to display the menu.
 Press the ▲ or ▼ button to select "Channel", then press the **ENTER** ☞ button.
2. Press the ▲ or ▼ button to select "Signal Strength", then press the **ENTER** ☞ button.
 If the signal strength meter indicates that the signal is weak, physically adjust your antenna to increase the signal strength.
 Continue to adjust the antenna until you find the best position with the strongest signal.

 Press the **EXIT** button to exit.





Using Your TV as a Computer (PC) Display

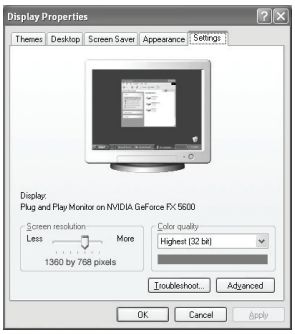
Setting Up Your PC Software (Based on Windows XP)

The Windows display-settings for a typical computer are shown below. The actual screens on your PC will probably be different, depending upon your particular version of Windows and your particular video card. However, even if your actual screens look different, the same basic set-up information will apply in almost all cases. (If not, contact your computer manufacturer or Samsung Dealer.)

1. First, click on "Control Panel" on the Windows start menu.
2. When the control panel window appears, click on "Appearance and Themes" and a display dialog-box will appear.
3. When the control panel window appears, click on "Display" and a display dialog-box will appear.
4. Navigate to the "Settings" tab on the display dialog-box.
 The correct size setting (resolution)

 Optimum: 1360 X 768 pixels

 If a vertical-frequency option exists on your display settings dialog box, the correct value is "60" or "60 Hz". Otherwise, just click "OK" and exit the dialog box.



Display Modes

If the signal from the system equals the standard signal mode, the screen is adjusted automatically. If the signal from the system doesn't equal the standard signal mode, adjust the mode by referring to your videocard user guide; otherwise there may be no video. For the display modes listed below, the screen image has been optimized during manufacturing.

D-Sub Input

Mode	Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock Frequency (MHz)	Sync Polarity (H/V)
IBM	640x350	31.469	70.086	25.175	+/-
	720×400	31.469	70.087	28.322	-/+
VESA	640×480	31.469	59.940	25.175	-/-
	640×480	37.861	72.809	31.500	-/-
	640×480	37.500	75.000	31.500	-/-
	800×600	37.879	60.317	40.000	+/+
	800×600	48.077	72.188	50.000	+/+
	800×600	46.875	75.000	49.500	+/+
	1024×768	48.363	60.004	65.000	-/-
	1024×768	56.476	70.069	75.000	-/-
	1024×768	60.023	75.029	78.750	+/+
	1360 x 768	47.712	60.015	85.500	+/+

HDMI/DVI Input

Mode	Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock Frequency (MHz)	Sync Polarity (H/V)
VESA	640×480	31.469	59.940	25.175	-/-
	800×600	37.879	60.317	40.000	+/+
	1024×768	48.363	60.004	65.000	-/-
	1360 x 768	47.712	60.015	85.500	+/+

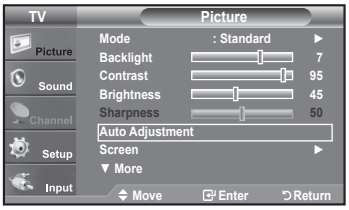
Setting up the TV with your PC

How to Auto Adjust

Use the Auto Adjust function to have the TV set automatically adjust the video signals it receives.
The function also automatically fine-tunes the settings and adjusts the frequency values and positions.

- ➢ This function does not work in DVI-Digital mode.
- ➢ Preset: Press the **SOURCE** button to select PC mode.

1. Press the **MENU** button to display the menu.
Press the ▲ or ▼ button to select “Picture”, then press the **ENTER** ↵ button.



2. Press the ▲ or ▼ button to select "Auto Adjustment", then press the **ENTER** ↵ button.

Press the **EXIT** button to exit.

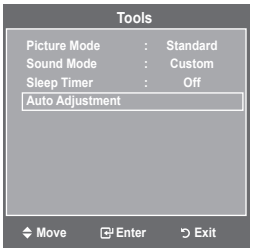
Easy Setting

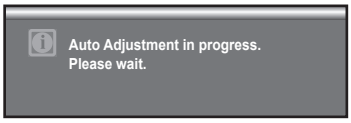
1. Press the **TOOLS** button on the remote control.

2. Press the ▲ or ▼ button to select “Sound Mode”.

3. Press the ◄ or ►button to select the required option.

4. Press the **EXIT** or **TOOLS** button to exit.



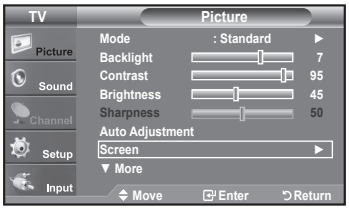


Adjusting the Screen Quality

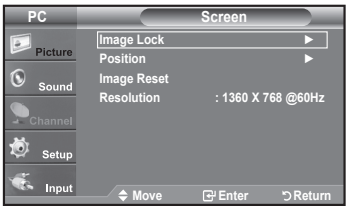
The purpose of the picture quality adjustment is to remove or reduce picture noise. If the noise is not removed by fine tuning alone, then make the vertical frequency adjustments on your PC and fine tune again. After the noise has been reduced, re-adjust the picture so that it is aligned on the center of the screen.

- ➢ Preset: Press the **SOURCE** button to select PC mode.

1. Press the **MENU** button to display the menu.
Press the ▲ or ▼ button to select "Picture", then press the **ENTER** ↵ button.
Press the ▲ or ▼ button to select "Screen", then press the **ENTER** ↵ button.



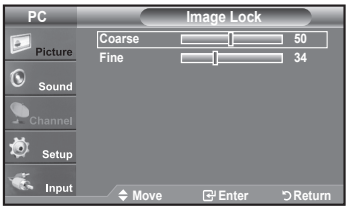
2. Press the **ENTER** ↵ button to select "Image Lock".



3. Press the ▲ or ▼ button to select "Coarse" or "Fine", then press the **ENTER** ↵ button.
Press the ◄ or ► button to adjust the screen quality.
➢ Vertical stripes may appear or the picture may be blurry.

Press the **ENTER** ↵ button.

Press the **EXIT** button to exit.





Changing the Screen Position

Adjust the PC's screen positioning if it does not fit the TV screen.

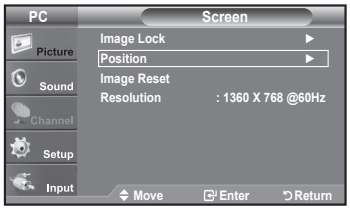
➢ Preset: Press the **SOURCE** button to select PC mode.

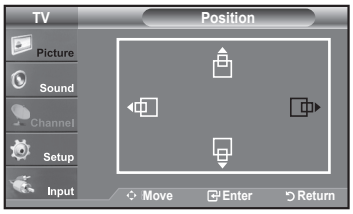
1. Press the **MENU** button to display the menu.
Press the ▲ or ▼ button to select "Picture", then press the **ENTER** ↵ button.
Press the ▲ or ▼ button to select "Screen", then press the **ENTER** ↵ button.

2. Press the ▲ or ▼ button to select "Position", then press the **ENTER** ↵ button.

3. Press the ▲ or ▼ button to adjust the V-Position.
Press the ◄ or ► button to adjust the H-Position.
Press the **ENTER** ↵ button.

Press the **EXIT** button to exit.





Initializing the Screen Position, Coarse and Fine

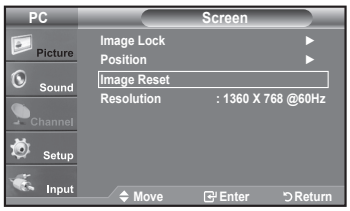
You can replace all image settings with the factory default values.

➢ Preset: Press the **SOURCE** button to select PC mode.

1. Press the **MENU** button to display the menu.
Press the ▲ or ▼ button to select "Picture", then press the **ENTER** ↵ button.
Press the ▲ or ▼ button to select "Screen", then press the **ENTER** ↵ button.

2. Press the ▲ or ▼ button to select "Image Reset", then press the **ENTER** ↵ button.

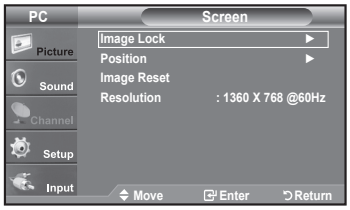
Press the **EXIT** button to exit.





Viewing the Resolution

You can confirm the resolution configured for the PC.

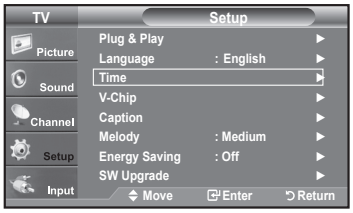


Setting the Clock

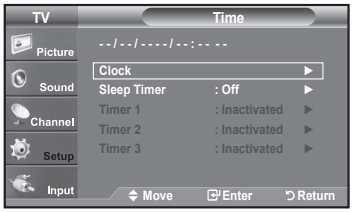
Setting the clock is necessary in order to use the various timer features of the TV.
Also, you can check the time while watching the TV. (Just press the **INFO** button.)

Option 1: Setting the Clock Manually

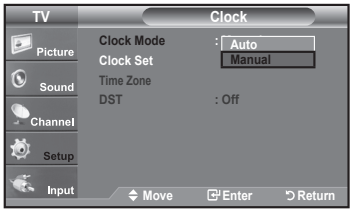
1. Press the **MENU** button to display the menu.
Press the ▲ or ▼ button to select "Setup", then press the **ENTER** ↵ button.
Press the ▲ or ▼ button to select "Time", then press the **ENTER** ↵ button.



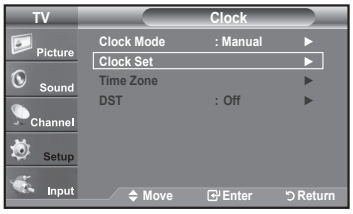
2. Press the **ENTER** ↵ button to select "Clock".



3. Press the **ENTER** ↵ button to select “Clock Mode”.
Press the ▲ or ▼ button to select “Manual”, then press the **ENTER** ↵ button.



4. Press the ▲ or ▼ button to select “Clock Set”, then press the **ENTER** ↵ button.

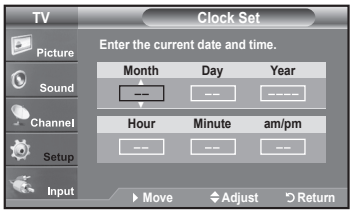


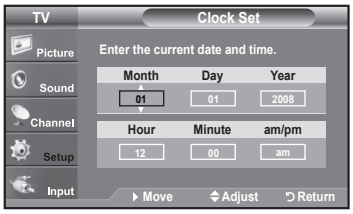
5. Press the ◄ or ► button to move to “Month”, “Day”, “Year”, “Hour”, “Minute”, or “am/pm”. Set the date and time you want by pressing the ▲ or ▼ button, then press the **ENTER** ↵ button.

Press the **EXIT** button to exit.

➢ The current time will appear every time you press the **INFO** button.

➢ You can set the month, day, year, hour and minute directly by pressing the number buttons on the remote control.

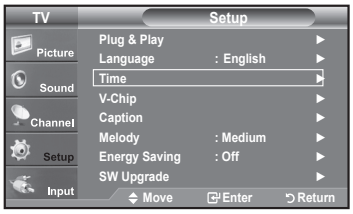




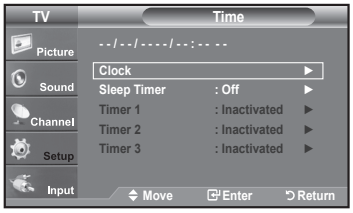
Option 2: Setting the Clock Automatically

The Clock can be set automatically if you are receiving a digital signal.

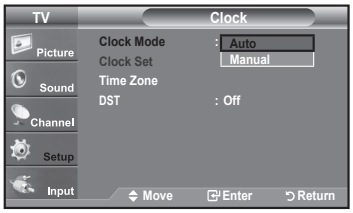
1. Press the **MENU** button to display the menu.
Press the ▲ or ▼ button to select "Setup", then press the **ENTER** ⏎ button.
Press the ▲ or ▼ button to select "Time", then press the **ENTER** ⏎ button.



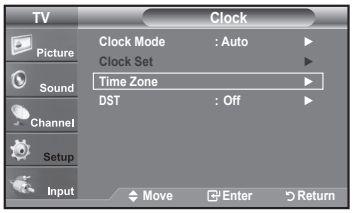
2. Press the **ENTER** ⏎ button to select "Clock".



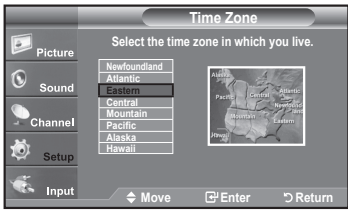
3. Press the **ENTER** ⏎ button to select “Clock Mode”.
Press the ▲ or ▼ button to select “Auto”, then press the **ENTER** ⏎ button.



4. Press the ▲ or ▼ button to select “Time Zone”, then press the **ENTER** ⏎ button.



5. Press the ▲ or ▼ button to highlight the time zone for your local area, then press the **ENTER** ⏎ button.



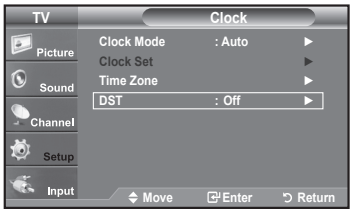
6. Press the ▲ or ▼ button to select “DST”, then press the **ENTER** ⏎ button.

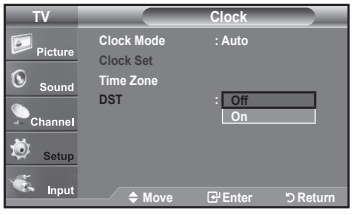
Press the ▲ or ▼ button to select “Off” or “On”, then press the **ENTER** ⏎ button.

Press the **EXIT** button to exit.

➢ Depending on the broadcast station and signal, the auto time may not be set correctly. If this occurs, set the time manually.

➢ The Antenna or cable must be connected in order to set the time automatically.





Setting the Sleep Timer

The sleep timer automatically shuts off the TV after a preset time (30, 60, 90, 120, 150 and 180 minutes).

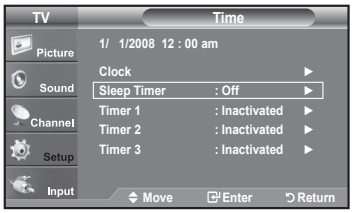
1. Press the **MENU** button to display the menu.
Press the ▲ or ▼ button to select "Setup", then press the **ENTER** ↵ button.
Press the ▲ or ▼ button to select "Time", then press the **ENTER** ↵ button.

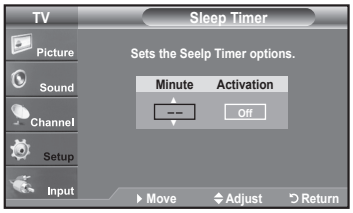
2. Press the ▲ or ▼ button to select "Sleep Timer", then press the **ENTER** ↵ button.

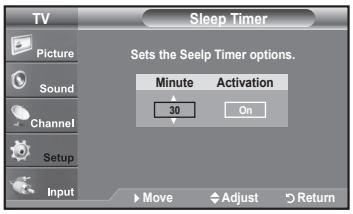
3. Press the ▲ or ▼ button to adjust “Minute”, then press the **ENTER** ↵ button.
➢ Setting the Timer sets the “Activation” to “On” automatically.

➢ **To cancel the set sleep timer :**
Press the ◄ or ► button to select “Activation”.
Press the ▲ or ▼ button to select “Off”, then press the **ENTER** ↵ button.

Press the **EXIT** button to exit.







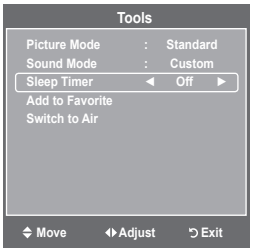
Easy Setting

1. Press the **TOOLS** button on the remote control.

2. Press the ▲ or ▼ button to select “Sleep Timer”.

3. Press the ◄ or ► button to select the minute.

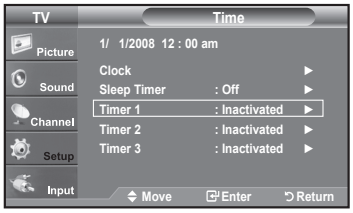
4. Press the **EXIT** or **TOOLS** button to exit.



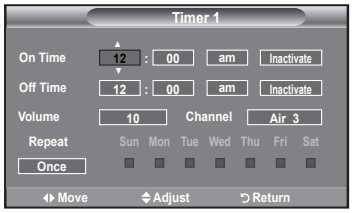
Setting the On/Off Timer

1. Press the **MENU** button to display the menu.
Press the ▲ or ▼ button to select "Setup", then press the **ENTER** ↵ button.
Press the ▲ or ▼ button to select "Time", then press the **ENTER** ↵ button.

2. Three different On/Off Timer Settings can be made. Press the ▲ or ▼ button to select “Timer 1”, “Timer 2” or “Timer 3”, then press the **ENTER** ↵ button.



3. Press the ◄ or ► button to select the desired item below.
Press the ▲ or ▼ button to adjust the setting.



- **On Time**: Set the Hour, Minute, am/pm, and Activation/Inactivation. (To activate timer with the setting you’ve chosen, set to “Activate”.)
- **Off Time**: Set the Hour, Minute, am/pm, and Activation/Inactivation. (To activate timer with the setting you’ve chosen, set to “Activate”.)
- **Volume**: Set the required volume level.
- **Channel**: Select the desired channel.
- **Repeat**: Select “Once”, “Everyday”, “Mon~Fri”, “Mon~Sat”, “Sat~Sun”, or “Manual”.
 - ➢ When “Manual” is selected, press the ► button to select the desired day of the week. Press the **ENTER** ↵ button over the desired day and the ✓ mark will appear.

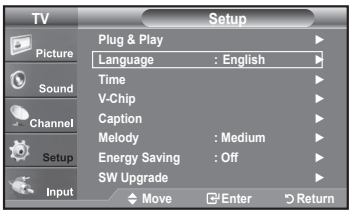
Press the **EXIT** button to exit.

- ➢ You can set the hour, minute and channel by pressing the number buttons on the remote control.
- ➢ **Auto Power Off**
 When you set the timer On, the television will eventually turn off, if no controls are operated for 3 hours after the TV was turned on by the timer. This function is only available in timer On mode and prevents overheating, which may occur if a TV is on for too long time.

Function Description

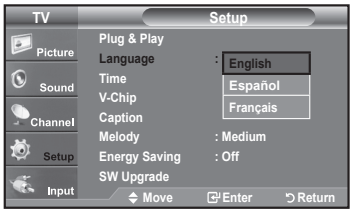
Selecting a Menu Language

1. Press the **MENU** button to display the menu.
Press the ▲ or ▼ button to select "Setup", then press the **ENTER** ↵ button.
Press the ▲ or ▼ button to select "Language", then press the **ENTER** ↵ button.



2. Press the ▲ or ▼ button to select “English”, “Español” or “Français”.
Press the **ENTER** ↵ button.

Press the **EXIT** button to exit.



Using the V-Chip

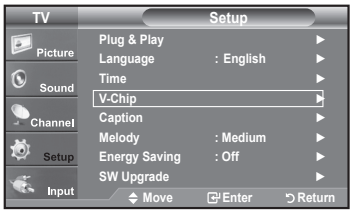
The V-Chip feature automatically locks out programs that are deemed inappropriate for children. The user must enter a PIN (personal ID number) before any of the V-Chip restrictions are set up or changed.
➢ "V-Chip" function is not available in HDMI, component or PC mode.

U.S.A Only

This product is covered by the following U.S.patents : US4,930,158,US4,930,160

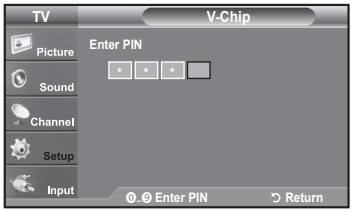
Setting Up Your Personal ID Number (PIN)

1. Press the **MENU** button to display the menu.
Press the ▲ or ▼ button to select "Setup", then press the **ENTER** ↵ button.



2. Press the ▲ or ▼ button to select "V-Chip", then press the **ENTER** ↵ button.
The message "Enter PIN" will appear. Enter your 4 digit PIN number.

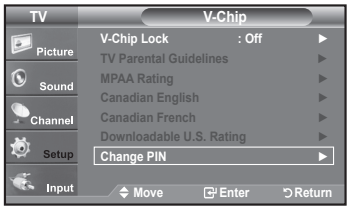
➢ The default PIN number of a new TV set is "0-0-0-0".

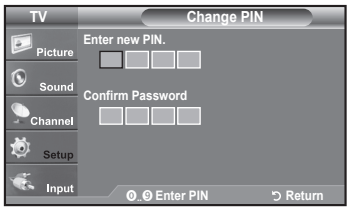


3. The "V-Chip" screen will appear.
Press the ▲ or ▼ button to select "Change PIN", then press the **ENTER** ↵ button. The Change PIN screen will appear. Choose any 4 digits for your PIN and enter them. As soon as the 4 digits are entered, the "Confirm Password" screen appears. Re-enter the same 4 digits. When the Confirm screen disappears, your PIN has been memorized.

Press the **EXIT** button to exit.

➢ If you forget the PIN, press the remote-control buttons in the following sequence, which resets the pin to 0-0-0-0 : Power Off. → Mute → 8 → 2 → 4 → Power On.

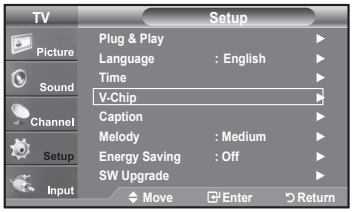


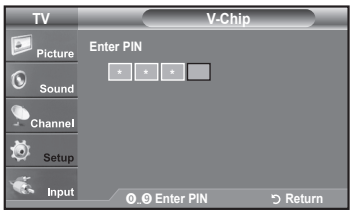


How to Enable/Disable the V-Chip

1. Press the **MENU** button to display the menu.
Press the ▲ or ▼ button to select "Setup", then press the **ENTER** ↵ button.

2. Press the ▲ or ▼ button to select “V-Chip”, then press the **ENTER** ↵ button.
The message “Enter PIN” will appear. Enter your 4 digit PIN number.

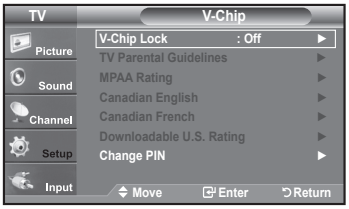


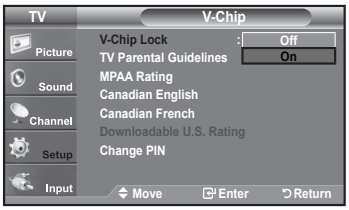


3. The “V-Chip” screen will appear.
To enable the V-Chip feature, press the **ENTER** ↵ button so that the “V-Chip Lock” field is “On”. (Pressing the ▲ or ▼ button will alternate between “On” and “Off”.)

Press the **ENTER** button.

Press the **EXIT** button to exit.



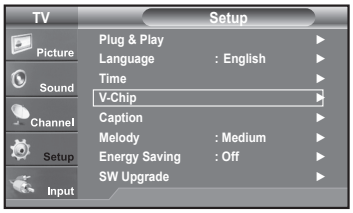


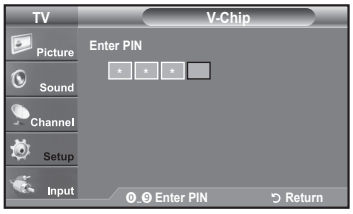
How to Set up Restrictions Using the “TV Parental Guidelines”

First, set up a personal identification number (PIN) and enable the V-Chip. (See previous section.)
Parental restrictions can be set up using either of two methods: The TV guidelines or the MPAA rating.

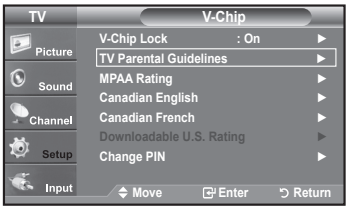
1. Press the **MENU** button to display the menu.
Press the ▲ or ▼ button to select “Setup”, then press the **ENTER** ↵ button.

2. Press the ▲ or ▼ button to select “V-Chip”, then press the **ENTER** ↵ button.
The message “Enter PIN” will appear. Enter your 4 digit PIN number.



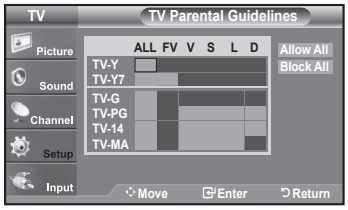


3. The “V-Chip” screen will appear. Press the ▲ or ▼ button to select “TV Parental Guidelines”, then press the **ENTER** ↵ button.

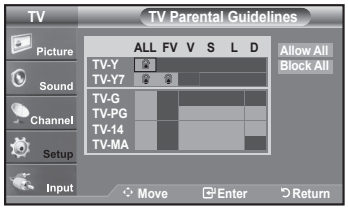


4. The “TV Parental Guidelines” screen will appear.
Press the ▲ or ▼ button to select one of the six aged based categories:

- **TV-Y**: Young children
- **TV-Y7**: Children 7 and over
- **TV-G**: General audience
- **TV-PG**: Parental guidance
- **TV-14**: Viewers 14 and over
- **TV-MA**: Mature audience



5. At this point, one of the TV-Ratings is selected.
Press the **ENTER** ↵ button. Depending on your existing setup, the “ 🔒 ” symbol will be selected. (Blank = Unblocked, 🔒 = Blocked)
While “ 🔒 ” is selected, press the **ENTER** ↵ button to block or unblock the category.
To select a different TV-Rating, press the ▲ or ▼ button and then repeat the process.



➢ Allow all: Press to unlock all TV ratings. / Block all: Press to lock all TV ratings.

➢ The TV-Y, TV-Y7, TV-G, TV-PG, TV-14 and TV-MA have additional options. See the next step to change any of the following sub-ratings:

FV: Fantasy violence / D: Sexually Suggestive Dialog / L: Adult Language / S: Sexual situation / V: Violence

➢ The V-Chip will automatically block certain categories that are “more restrictive”. For example, if you block “TV-Y” category, then TV-Y7 will automatically be blocked. Similarly, if you block the TV-G category, then all the categories in the “young adult” group will be blocked (TV-G, TV-PG, TV-14 and TV-MA). The sub-ratings (D, L, S, V) work together similarly.(See next section.)

6. How to set the FV, D, L, S and V sub-ratings.
First, select one of these TV-Ratings: TV-Y, TV-Y7, TV-G, TV-PG, TV-14 or TV-MA (See Step 4) and press the ► button. The “ 🔒 ” symbol will be displayed for each sub-rating.
While “ 🔒 ” is selected, press the **ENTER** ↵ button to go to a sub rating.
Press **ENTER** ↵ to block the sub rating. To select a different TV-Rating, press the ▲ or ▼ button and then repeat the process.

- **ALL**: Lock all TV ratings.
- **FV**: Fantasy violence
- **V**: Violence
- **S**: Sexual situation
- **L**: Adult Language
- **D**: Sexually Suggestive Dialog

➢ The V-chip will automatically block certain categories that are “More restrictive”. For example, if you block “L” sub-rating in TV-PG, then the “L” sub-ratings in TV-14 and TV-MA will automatically be blocked.

7. Press the **EXIT** button to clear all the screens. (Or proceed to the next section, and set up additional restrictions based on the MPAA codes.)

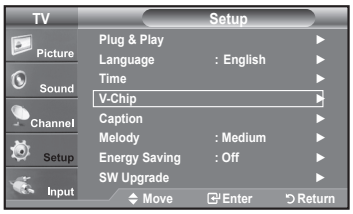
➢ These categories consist of two separate groups: TV-Y and TV-Y7 (young children through age 7) and TV-G through TV-MA (everybody else). The restrictions for these two groups work independently: If a household includes very young children as well as young adults, the TV guidelines must be set up separately for each age group. (See next step.)

How to Set up Restrictions Using the MPAA Ratings: G, PG, PG-13, R, NC-17, X, NR

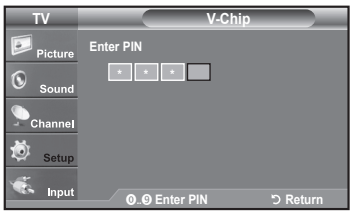
The MPAA rating system uses the Motion Picture Association of America (MPAA) system and its main application is for movies. When the V-Chip lock is on, the TV will automatically block any programs that are coded with objectionable ratings (either MPAA or TV-Ratings).

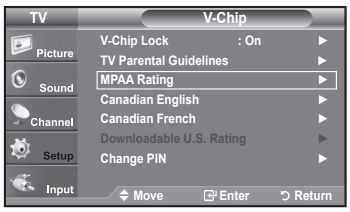
1. Press the **MENU** button to display the menu.
Press the ▲ or ▼ button to select "Setup", then press the **ENTER** ↵ button.

2. Press the ▲ or ▼ button to select "V-Chip", then press the **ENTER** ↵ button.
The message "Enter PIN" will appear. Enter your 4 digit PIN number.

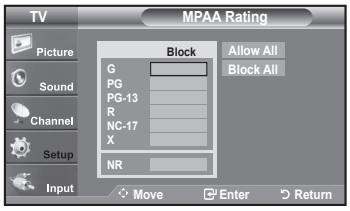


3. The "V-Chip" screen will appear. Press the ▲ or ▼ button to select "MPAA Rating", then press the **ENTER** ↵ button.

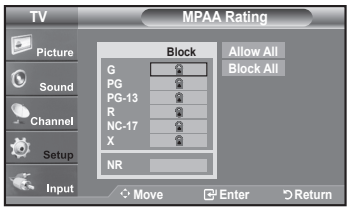




4. The "MPAA Rating" screen will appear. Repeatedly press the ▲ or ▼ button to select a particular MPAA category. Pressing the ▲ or ▼ button will cycle through the MPAA categories:



- **G:** General audience (no restrictions).
- **PG:** Parental guidance suggested.
- **PG-13:** Parents strongly cautioned.
- **R:** Restricted. Children under 17 should be accompanied by an adult.
- **NC-17:** No children under age 17.
- **X:** Adults only.
- **NR:** Not rated.



➢ Allow all: Press to unlock all TV ratings.
Block all: Press to lock all TV ratings.

➢ While a particular category is selected, press the **ENTER** ↵ button to activate it. The " 🔒 " symbol will be displayed. Press the **ENTER** ↵ button to block or unblock the category.

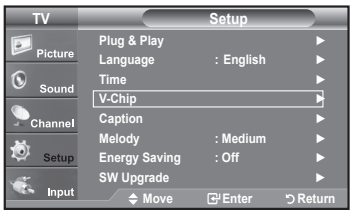
➢ The V-Chip will automatically block any category that is "more restrictive". For example, if you block the "PG-13" category, then "R", "NC-17" and "X" will automatically be blocked also.

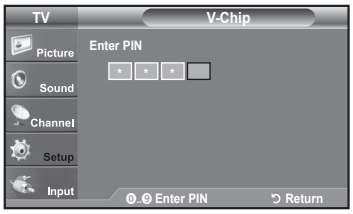
Press the **EXIT** button to exit.

How to Set up Restrictions Using the 'Canadian English'

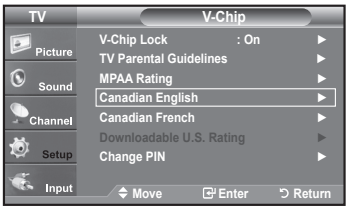
1. Press the **MENU** button to display the menu.
Press the ▲ or ▼ button to select "Setup", then press the **ENTER** ↵ button.

2. Press the ▲ or ▼ button to select "V-Chip", then press the **ENTER** ↵ button.
The message "Enter PIN" will appear. Enter your 4 digit PIN number.





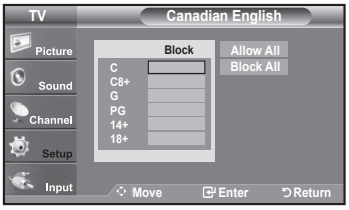
3. The "V-Chip" screen will appear. Press the ▲ or ▼ button to select "Canadian English", then press the **ENTER** ↵ button.

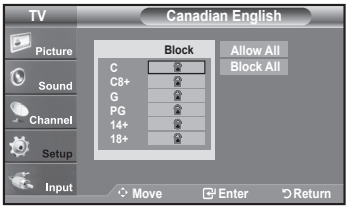


4. Press the ▲ or ▼ button to select a appropriate restriction.
Press the **ENTER** ↵ button to activate the restriction selected. The " 🔒 " symbol is indicated.

Press the **EXIT** button to exit.

➢ Allow all: Press to unlock all TV ratings.
Block all: Press to lock all TV ratings.





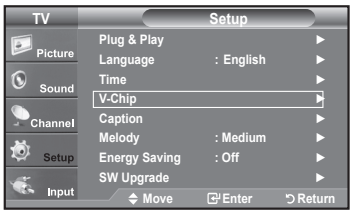
- **C:** Programming intended for children under age 8.
- **C8+:** Programming generally considered acceptable for children 8 years and over to watch on their own.
- **G:** General programming, suitable for all audiences.
- **PG:** Parental Guidance.
- **14+:** Programming contains themes or content which may not be suitable for viewers under the age of 14.
- **18+:** Adult programming.

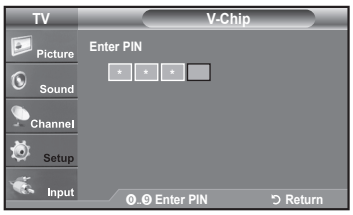
➢ The V-Chip will automatically block any category that is "more restrictive". For example, if you block G category, then PG, 14+ and 18+ will automatically be blocked also.

How to Set up Restrictions Using the 'Canadian French'

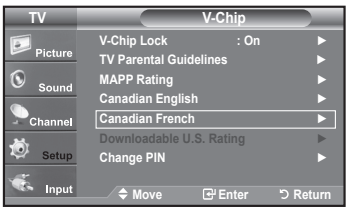
1. Press the **MENU** button to display the menu.
Press the ▲ or ▼ button to select "Setup", then press the **ENTER** ↵ button.

2. Press the ▲ or ▼ button to select "V-Chip", then press the **ENTER** ↵ button.
The message "Enter PIN" will appear. Enter your 4 digit PIN number.





3. The "V-Chip" screen will appear. Press the ▲ or ▼ button to select "Canadian French", then press the **ENTER** ↵ button.



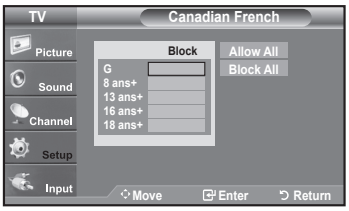
4. Press the ▲ or ▼ button to select an appropriate restriction.
Press the **ENTER** ↵ button to activate the restriction selected. The " 🔒 " symbol is indicated.

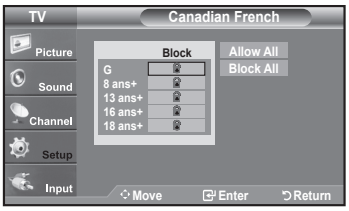
Press the **EXIT** button to exit.

➢ Allow all: Press to unlock all TV ratings.
Block all: Press to lock all TV ratings.

- **G:** General
- **8 ans+:** Programming generally considered acceptable for children 8 years and over to watch on their own.
- **13 ans+:** Programming may not be suitable for children under the age of 13.
- **16 ans+:** Programming is not suitable for children under the age of 16.
- **18 ans+:** Programming restricted to adults.

➢ The V-Chip will automatically block any category that is "more restrictive". For example, if you block 8 ans+ category, then 13 ans+, 16 ans+ and 18 ans+ will automatically be blocked also.



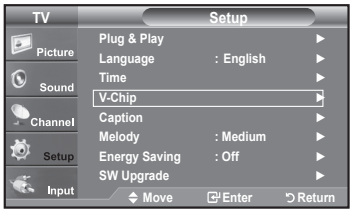


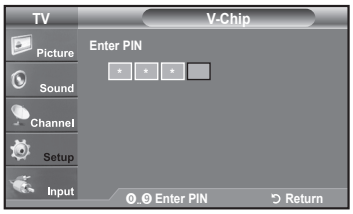
Using the V-Chip for Digital channels

Parental restriction information can be used while watching DTV channels.

1. Press the **MENU** button to display the menu.
Press the ▲ or ▼ button to select “Setup”, then press the **ENTER** ↵ button.

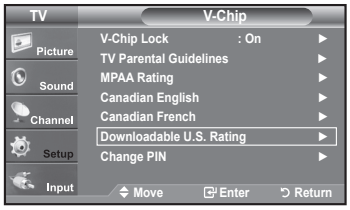
2. Press the ▲ or ▼ button to select “V-Chip”, then press the **ENTER** ↵ button.
The message “Enter PIN” will appear. Enter your 4 digit PIN number.





3. The “V-Chip” screen will appear. Press the ▲ or ▼ button to select “Downloadable U.S. Rating”, then press the **ENTER** ↵ button.

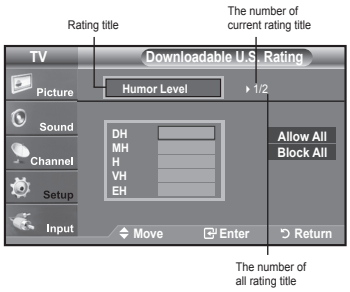
- ➢ If information is not downloaded from the broadcasting station, the Downloadable U.S. rating menu is deactivated.
- ➢ Parental restriction information is automatically downloaded while watching DTV channels. It may take several seconds.
- ➢ The Downloadable U.S. rating menu is available for use after information is downloaded from the broadcasting station. However, depending on the infor mation from the broadcasting station, it may not be available for use.



4. Press the ▲ or ▼ button to select a appropriate restriction.
Press the **ENTER** ↵ button to activate the restriction selected. The “ 🔒 ” symbol is indicated.

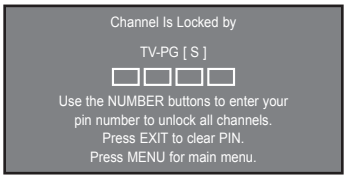
Press the **EXIT** button to exit.

- ➢ Allow all: Press to unlock all TV ratings. / Block all: Press to lock all TV ratings.
- ➢ Parental restriction levels differ depending on the broadcasting station.
- ➢ The default menu name and Downloadable US rating changes depending on the downloaded information.
- ➢ Even if you set the On-screen display to your desired language, the "Downloadable U.S. Rating" menu will appear in English only.
- ➢ The rating will automatically block certain categories that are more restrictive.
- ➢ The rating titles(For example: Humor Level.,etc) and TV ratings (For example: DH, MH, H., etc) may differ depending on the broadcasting station.



How to Reset the TV after the V-Chip Blocks a Channel (“Emergency Escape”)

If the TV is tuned to a restricted channel, the V-Chip will block it. The screen will go blank and the following message will appear:



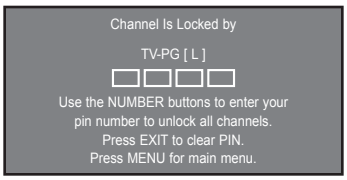
1. Enter your PIN.
To resume normal viewing, tune to a different channel using **CH**∧ or **CH**∨ button. Under certain conditions (depending on the rating of the local TV programs) the V-Chip might lock out all the channels. In this case, use the V-Chip function for an “emergency escape”:

2. Press the **MENU** button. Press the ▲ or ▼ button to select "Setup", then press the **ENTER** ↵ button.

3. Press the ▲ or ▼ button to select "V-Chip", then press the **ENTER** ↵ button.

4. Enter your PIN, then press the **ENTER** ↵ button and press the ▲ or ▼ button to temporarily disable the V-Chip Lock.

- ➢ If you forget the PIN, press the remote-control buttons in the following sequence, which resets the pin to 0-0-0-0 : Power Off. → MUTE → 8 → 2 → 4 → Power On.

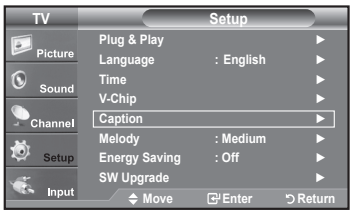


Viewing Closed Captions (On-Screen Text Messages) - Analog

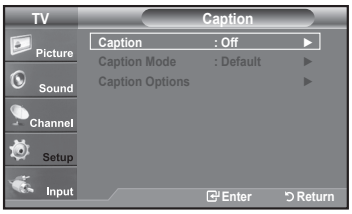
The Analog Caption function operates in either analog TV channel mode or when a signal is supplied from an external device to TV. (Depending on the broadcasting signal, the Analog Caption function may operate on digital channels.)

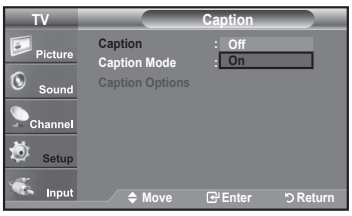
1. Press the **MENU** button to display the menu.
Press the ▲ or ▼ button to select “Setup”, then press the **ENTER** ↵ button.

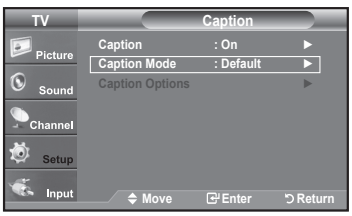
2. Press the ▲ or ▼ button to select “Caption”, then press the **ENTER** ↵ button.



3. Press the **ENTER** ↵ button to select “Caption”.
Press the ▲ or ▼ button to select “On”, then press the **ENTER** ↵ button.

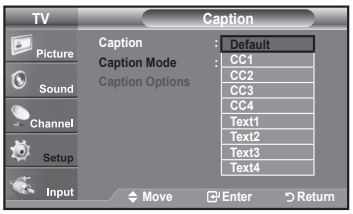






4. Press the ▲ or ▼ button to select “Caption Mode”, then press the **ENTER** ↵ button.
Press the ▲ or ▼ button to select submenu (Default, CC1~CC4 or Text1~Text4) you want, the press the **ENTER** ↵ button.

Press the **EXIT** button to exit.

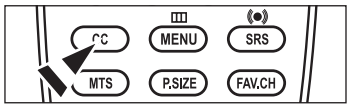


- **The default is “CC1”.**
- **CC1:** The Primary Synchronous Caption Service. These are captions in the primary language that must be in sync with the sound, preferably matched to a specific frame.
- **CC2:** The Special Non-Synchronous Use Captions. This channel carries data that is intended to augment information carried in the program.
- **CC3:** Secondary Synchronous Caption Service. Alternate program-related caption data, typically second language captions.
- **CC4:** Special Non-Synchronous Use Captions. Similar to CC2.
- **Text1:** First Text Service. This may be various non-program related data.
- **Text2:** Second Text Service. Additional data, usually not program related.
- **Text3/Text4:** Third and Fourth Text Services. These data channels should be used only if Text1 and Text2 are not sufficient.

➢ The Caption feature doesn’t work in Component, HDMI or PC modes.

➢ The availability of captions depends on the program being broadcast.

Press the CC button on the remote control to turn the Caption “On” or “Off”.



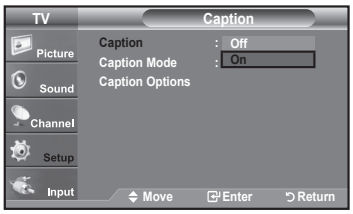
Viewing Closed Captions (On-Screen Text Messages) - Digital

The Digital Captions function operates on digital channels.

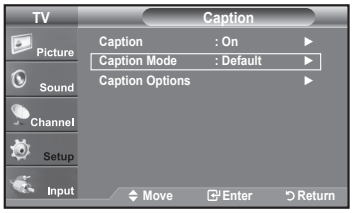
1. Press the **MENU** button to display the menu.
Press the ▲ or ▼ button to select “Setup”, then press the **ENTER** ↵ button.

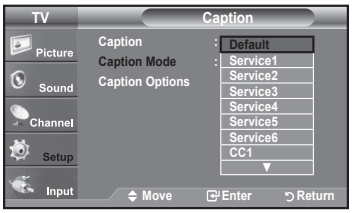
2. Press the ▲ or ▼ button to select “Caption”, then press the **ENTER** ↵ button.

3. Press the **ENTER** ↵ button to select “Caption”.
Press the ▲ or ▼ button to select “On”, then press the **ENTER** ↵ button.



4. Press the ▲ or ▼ button to select “Caption Mode”, then press the **ENTER** ↵ button.
Press the ▲ or ▼ button to select submenu (Default, Service1~Service6,CC1~CC4 or Text1~Text4) you want, then press the **ENTER** ↵ button.





5. Press the ▲ or ▼ button to select “Caption Options”, then press the **ENTER** ↵ button.

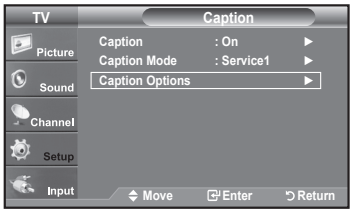
➢ “Caption Options” are available only when “Default” and “Service 1~Service 6” can be selected in “Caption Mode”.

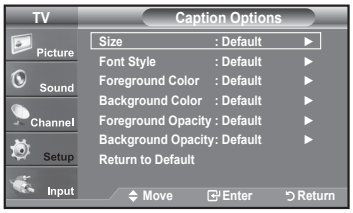
➢ Service1~6 in digital caption mode may not be available depending on the broadcast.

6. Press the ▲ or ▼ button to select “Size”, then press the **ENTER** ↵ button.
Press the ▲ or ▼ button to select the desired Caption option, then press the **ENTER** ↵ button.
Press the ▲ or ▼ button to select the desired sub-menu options (see options below), then press **ENTER** ↵ button.

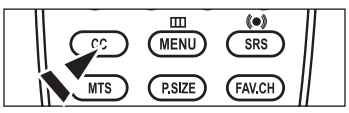
Press the **EXIT** button to exit.

➢ The availability of captions depends on the program being broadcast.
➢ “Default” means to follow the standard set by the broadcaster.
➢ Foreground and Background cannot be set to have the same color.
➢ “Foreground Opacity” and “Background Opacity” cannot be both set to Transparent.





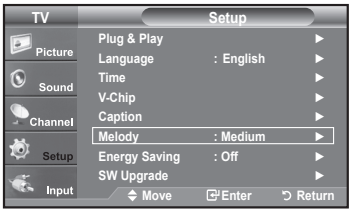
- **Size:** This option consists of “Default”, “Small”, “Standard” and “Large”. The default is “Standard”.
- **Font Style:** This option consists of “Default”, “Style0 ~ Style 7”. You can change the font you want. The default is “Style 0”.
- **Foreground Color:** This option consists of “Default”, “White”, “Black”, “Red”, “Green”, “Blue”, “Yellow”, “Magenta” and “Cyan”. You can change the color of the letter. The default is “White”.
- **Background Color:** This option consists of “Default”, “White”, “Black”, “Red”, “Green”, “Blue”, “Yellow”, “Magenta” and “Cyan”. You can change the background color of the caption. The default is “Black”.
- **Foreground Opacity:** This option consists of “Default”, “Transparent”, “Translucent”, “Solid” and “Flashing”. You can change the opacity of the letter.
- **Background Opacity:** This option consists of “Default”, “Transparent”, “Translucent”, “Solid”,and “Flashing”. You can change the background opacity of the caption.
- **Return to Default:** This option sets each of “Size”, “Font Style”, “Foreground Color”, “Background Color”, “Foreground Opacity” and “Background Opacity” to its default.



Press the **CC** button on the remote control to turn the Caption “On” or “Off”.

Adjusting the TV On/Off Melody Sound

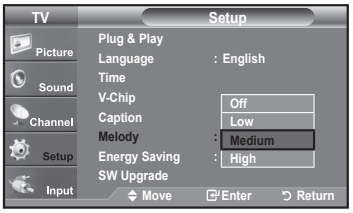
A melody sound can be set to come on when the TV is powered On or Off.



1. Press the **MENU** button to display the menu.
Press the ▲ or ▼ button to select "Setup", then press the **ENTER** ☞ button.

2. Press the ▲ or ▼ button to select "Melody", then press the **ENTER** ☞ button.

3. Press the ▲ or ▼ button to select “Off”, “Low”, “Medium” or “High”, then press the **ENTER** ☞ button.



- **Off** : Turns off the melody function.
- **Low** : Sets the melody volume to low.
- **Medium** : Sets the melody volume to medium.
- **High** : Sets the melody volume to high.

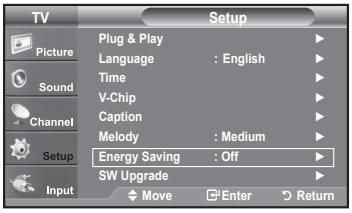
Press the **EXIT** button to exit.

➢ **The Melody does not play**

- When no sound is output from the TV because the **MUTE** button has been pressed.
- When no sound is output from the TV because the Volume has been reduced to minimum with the **VOL**⊖ button.
- When the TV is turned off by Sleep Timer function.

Using the Energy Saving Feature

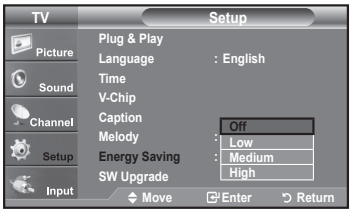
This feature adjusts the brightness of the TV in order to reduce power consumption. When watching TV at night, set the "Energy Saving" mode option to "High" to reduce eye fatigue as well as power consumption.



1. Press the **MENU** button to display the menu.
Press the ▲ or ▼ button to select "Setup", then press the **ENTER** ☞ button.

2. Press the ▲ or ▼ button to select "Energy Saving", then press the **ENTER** ☞ button.

Select the required option (“Off”, “Low”, “Medium”, “High”) by pressing the ▲ or ▼ button. Press the **ENTER** ☞ button.



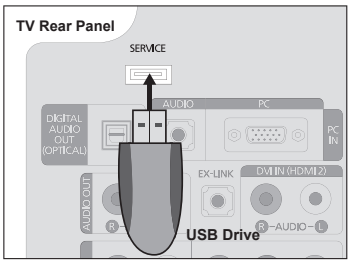
- **Off:** Turns off the energy saving function.
- **Low:** Sets the TV to low energy saving mode.
- **Medium:** Sets the TV to medium energy saving mode.
- **High:** Sets the TV to high energy saving mode.

Press the **EXIT** button to exit.

Upgrading the Software

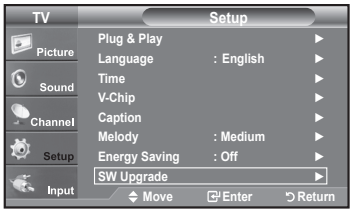
Samsung may offer upgrades for TV's firmware in the future. Please contact the Samsung call center at 1-800-SAMSUNG (726-7864) to receive information about downloading upgrades and using a USB drive. Upgrades will be possible by connecting a USB drive to the USB port located on your TV.

1. Insert a USB drive containing the firmware upgrade into the **SERVICE** port on the rear of the TV.



2. Press the **MENU** button to display the menu.
Press the ▲ or ▼ button to select “Setup”, then press the **ENTER** ↵ button.

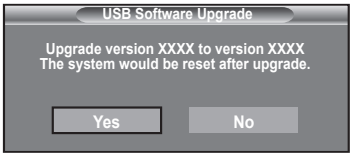
3. Press the ▲ or ▼ button to select “SW upgrade”, then press the **ENTER** ↵ button.



4. Press the **ENTER** ↵ button.
The message “Scanning for USB... It may take up to 30 seconds.” is displayed.



5. The message “Upgrade version XXXX to version XXXX The system would be reset after upgrade.” is displayed.
Press the ◄ or ► to select the “Yes”, then press the **ENTER** ↵ button.



Please be careful to not disconnect the power or remove the USB drive while upgrades are being applied. The TV will turn off and turn on automatically after completing the firmware upgrade. Please check the firmware version after the upgrades are complete. When software is upgraded, video and audio settings you have made will return to their default (factory) settings. We recommend you write down your settings so that you can easily reset them after the upgrade.

Appendix

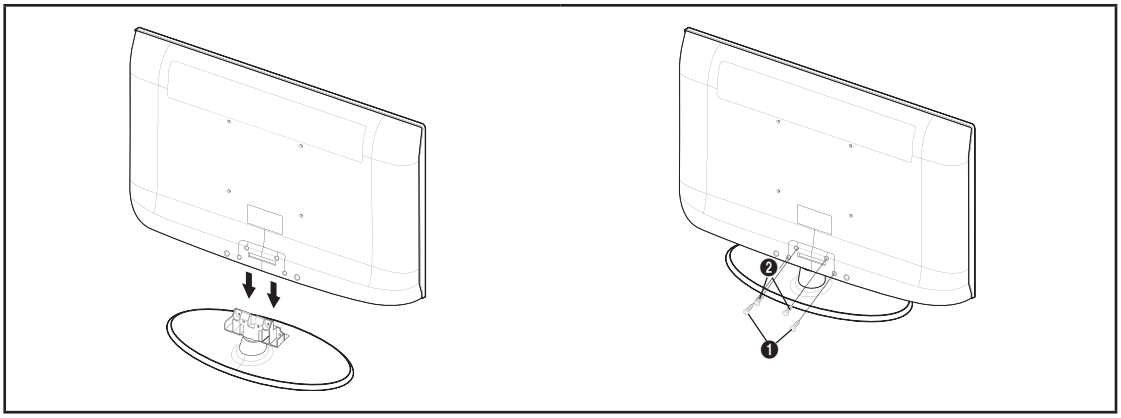
Troubleshooting

If the TV seems to have a problem, first try this list of possible problems and solutions.
If none of these troubleshooting tips apply, call your nearest Samsung service center.

Problem	Possible Solution
Poor picture	Try another channel. Adjust the antenna. Check all wire connections.
Poor sound quality.	Try another channel. Adjust the antenna.
No picture or sound.	Try another channel. Press the **SOURCE** button. Make sure the TV is plugged in. Check the antenna connections.
No sound or sound is too low at maximum volume.	First, check the volume of units connected to your TV (digital broadcasting receiver, DVD, cable broadcasting receiver, VCR, etc.). Then, adjust the TV volume accordingly.
Picture rolls vertically.	Check all wire connections.
The TV operates erratically.	Unplug the TV for 30 seconds, then try operating it again.
The TV won't turn on.	Make sure the wall outlet is working.
Remote control malfunctions	Replace the remote control batteries. Clean the upper edge of the remote control (transmission window). Check the battery terminals.
"Check signal cable" message.	Ensure that the signal cable is firmly connected to the PC source.
"Not Supported Mode" message.	Check the maximum resolution and connected device's Video frequency. Compare these values with the data in the Display Modes.
Digital broadcasting screen problem.	Please check the digital signal strength and input antenna.
The image is too light or too dark.	Adjust the Brightness and Contrast. Adjust the Fine tuning.
Black bars on the screen.	Make sure the broadcast you're receiving is High Definition (HD). HD channels sometimes broadcast Standard Definition (SD) programming, which can cause black bars. Set your cable/satellite box to stretch or widescreen mode to eliminate the bars.
Picture has a Red/Green or Pink tint.	Make sure the Component cables are connected to the correct jacks.
Closed Captioning not working.	If you are using a Cable/Satellite box, you must set Closed Captioning on the box, not your TV.
Snowy picture	Your cable box may need a firmware upgrade. Please contact your Cable company.
Ghosting on picture	This is sometimes caused by compatibility issues with your cable box. Try connecting Component cables instead.

<table>
<tr><th>Problem</th><th>Possible Solution</th></tr>
<tr><td>Horizontal bars appear to flicker, jitter or shimmer on the image.</td><td>Adjust the Coarse tuning and then adjust the Fine tuning.</td></tr>
<tr><td>Vertical bars appear to flicker, jitter or shimmer on the image.</td><td>Adjust the Coarse tuning and then adjust the Fine tuning.</td></tr>
<tr><td>Screen is black and power indicator light blinks steadily.</td><td>On your computer check: Power, Signal Cable.
The TV is using its power management system.
Move the computer's mouse or press any key on the keyboard.</td></tr>
<tr><td>Image is not stable and may appear to vibrate when you have a computer connected to the PC input.</td><td>If the setting is not correct, use your computer utility program to change the display settings.
➢ Your TV supports multiscan display functions within the following frequency domain:<table><tr><td>Horizontal frequency (kHz)</td><td>30~60</td></tr><tr><td>Vertical frequency (Hz)</td><td>60~75</td></tr><tr><td>PC Maximum refresh rate (at 60 Hz)</td><td>1360 X 768</td></tr></table></td></tr>
<tr><td>Image is not centered on the screen.</td><td>Adjust the horizontal and vertical position.
The screen position must be adjusted on the output source (i.e. STB) with a digital signal.</td></tr>
<tr><td>The picture appears distorted in the corner of the screen.</td><td>If "Just Scan" is selected with some external devices, the picture may appear distorted in the corner of the screen. This symptom is caused by the external devices, not TV.</td></tr>
<tr><td>The “Resets all settings to the default values” message appears.</td><td>This appears when you press and hold the EXIT button for a while. The product settings are reset to the factory defaults.</td></tr>
<tr><td colspan="2">This TFT LCD panel uses a panel consisting of sub pixels (3 133 440) which require sophisticated technology to produce. However, there may be few bright or dark pixels on the screen. These pixels will have no impact on the performance of the product.</td></tr>
</table>

Installing the Stand



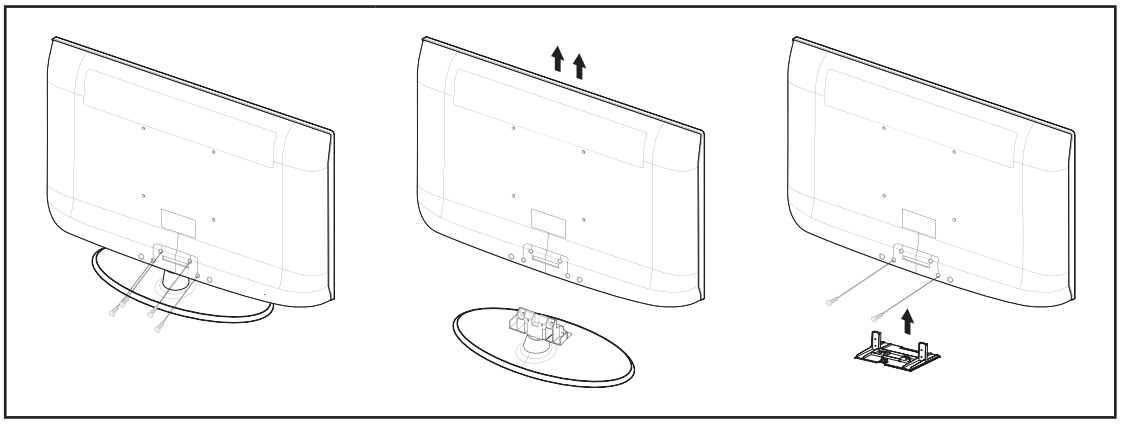
1. Attach your LCD TV to the stand.

- ➢ Two or more people should carry the TV.
- ➢ Make sure to distinguish between the front and back of the stand when attaching it.
- ➢ To make sure the TV is installed on the stand at a proper level, do not apply excess downward pressure to the upper left of right sides of the TV.

2. Fasten two screws at position ❶ and then fasten two screws at position ❷.

- ➢ Stand the product up and fasten the screws. If you fasten the screws with the LCD TV placed down, it may lean to one side.

Disconnecting the Stand



1. Remove four screws from the back of the TV.

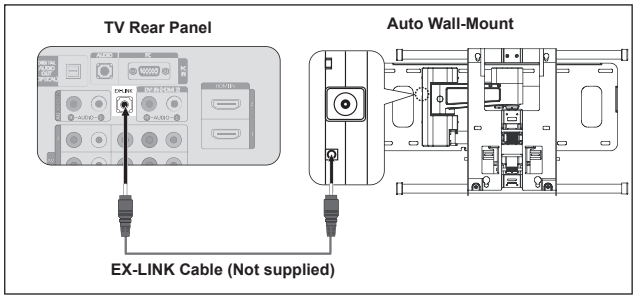
2. Separate the stand from the TV.

- ➢ Two or more people should carry the TV.

3. Cover the bottom hole with the cover.

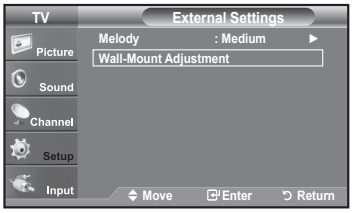
Auto Wall-Mount Adjustment (Sold separately)

Once the auto wall mount is installed, your TV's position can be easily adjusted.



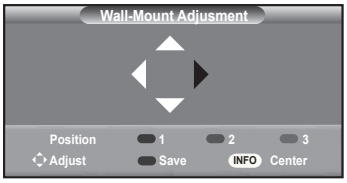
Entering the menu

1. Press the ▲, ▼, ◄ or ► button on your remote control.
- ➢ The Wall Mount Adjustment screen is displayed.
- ➢ If the Wall Mount Adjustment screen is not displayed when clicking on a direction button while watching your TV, use the menu to display that screen.
 - • Press the **MENU** butt on to display the menu. Press the ▲ or ▼ button to select "Setup", then press the **ENTER** ↵ button.
 - • Press the ▲ or ▼ button to select "External Settings", then press the **ENTER** ↵ button.
 - • Press the ▲ or ▼ button to select "Wall-Mount Adjustment", then press the **ENTER** ↵ button.

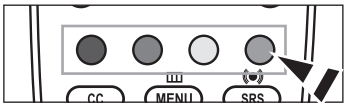


Remembering the Position

2. Adjust to the desired position using the ▲,▼,◄,► buttons.
- ➢ If you press an arrow button when no OSD is displayed on the TV screen, the Adjustment screen appears.
- ➢ Press the **INFO** button to reset. Press the ◄ or ► button to select "Yes", then press the **ENTER** ↵ button.
 The position is initialized to the default setting.

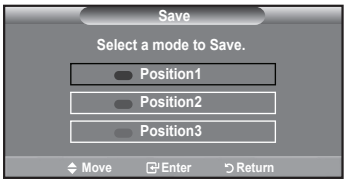


3. Press the blue button.
Press the ▲ and ▼ buttons to select a save mode from either Position 1, Position 2 or Position 3 in order to save the current position.
- ➢ To not save the current position, press the **RETURN** button.
- ➢ When selecting a save mode, you cannot use the Color buttons.



4. Press the **ENTER** ↵ button to save.
- ➢ When Position1 is selected, the message "Current position saved as Position1" is displayed.

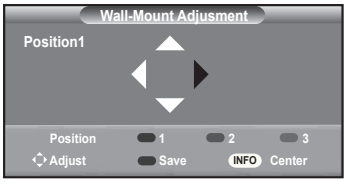
5. Press the **ENTER** ↵ button.
- ➢ The saved Position appears on the left side of the OSD.



Moving to the remembered position

1. Complete Step 1 of "Entering the menu".

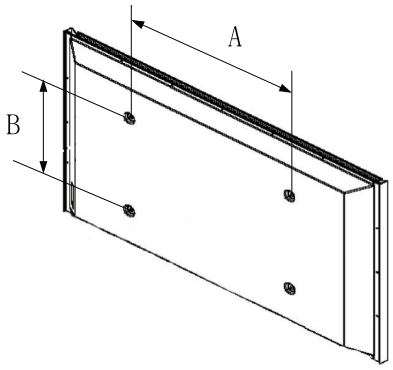
2. Pressing a Color (Red, Green, Yellow) button moves the auto wall mount to the saved position.
- ➢ You can move the wall mount to one of the 3 pre-set positions by pressing the Red (Position 1), Green (Position 2) or Yellow (Position 3) buttons.
- ➢ If you adjust the position after moving to a pre-set position, the position display will disappear.



➢ For installation, refer to the Installation Manual provided with the wall mount.
➢ For product installation and the installation and moving of the wall mount, make sure to consult a specialized installation company.
➢ This installation manual is to be used when attaching the wall mount to a wall. When attaching to other building materials, please contact your nearest dealer.

Wall Mount Kit Specifications (VESA)

Install your wall mount on a solid wall perpendicular to the floor.
When attaching to other building materials, please contact your nearest dealer.
If installed on a ceiling or slanted wall, it may fall and result in severe personal injury.



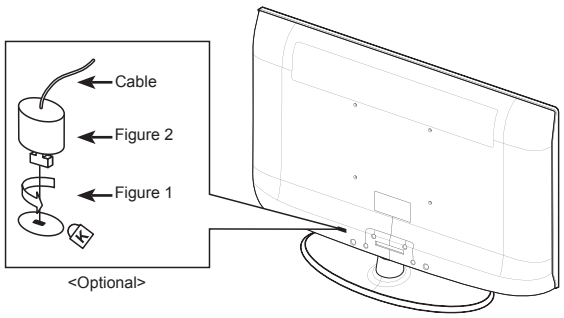
Product Family	inches	VESA Spec. (A * B)	Standard Screw	Quantity
LCD-TV	23~ 26	200 * 100	M4	4
	32 ~ 40	200 * 200	M6	
	46 ~ 52	600 * 400	M8	
	57	700 * 400 (No VESA)		
	57 ~ 70	800 * 400		
	80 ~	1400 * 800		
PDP-TV	42 ~ 50	600 * 400	M8	4
	55 ~ 70	800 * 400		
	63	No VESA		6
	80 ~	1400 * 800		4

- Standard dimensions for wall mount kits are shown in the table above.
- When purchasing our wall mount kit, a detailed installation manual and all parts necessary for assembly are provided.
- Do not use screws longer than the standard dimension, as they may cause damage to the inside of the TV set.
- For wall mounts that do not comply with the VESA standard screw specifications, the length of the screws may differ depending on their specifications.
- Do not use screws that do not comply with the VESA standard screw specifications.
 Do not use fasten the screws too strongly, this may damage the product or cause the product to fall, leading to personal injury.
 Samsung is not liable for these kinds of accidents.
- Samsung is not liable for product damage or personal injury when a non-VESA or non-specified wall mount is used or the consumer fails to follow the product installation instructions.
- Do not exceed 15 degrees tilt when mounting this TV.

Do not install your Wall Mount Kit while your TV is turned on.
It may result in personal injury due to electric shock.

Using the Anti-Theft Kensington Lock

The Kensington Lock is a device used to physically fix the system when using it in a public place. The appearance and locking method may differ from the illustration depending on the manufacturer. Refer to the manual provided with the Kensington Lock for proper use. The locking device has to be purchased separately.



➢ The location of the Kensington Lock may be different depending on its model.

1. Insert the locking device into the Kensington slot on the LCD TV (Figure 1) and turn it in the locking direction (Figure 2).

2. Connect the Kensington Lock cable.

3. Fix the Kensington Lock to a desk or a heavy stationary object.

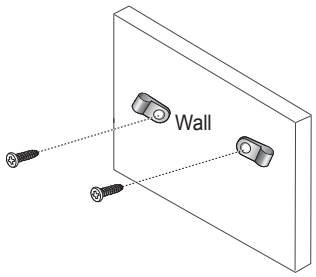
Securing the TV to the Wall

Caution: Pulling, pushing, or climbing on the TV may cause the TV to fall. In particular, ensure your children do not hang over or destabilize the TV; doing so may cause the TV to tip over, causing serious injuries or death. Follow all safety precautions provided on the included Safety Flyer. For added stability, install the anti-fall device for safety purposes, as follows.

To avoid the TV from falling:

1. Put the screws into the clamps and firmly fasten them onto the wall. Confirm that the screws have been firmly installed onto the wall.

- ➢ You may need additional material such as an anchor depending on the type of wall.
- ➢ Since the necessary clamps, screws, and string are not supplied, please purchase these additionally.

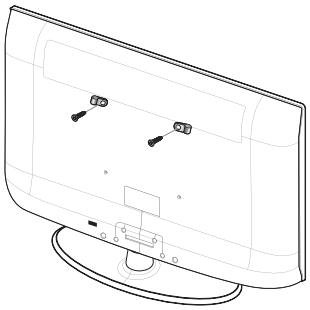


2. Remove the screws from the center back of the TV, put the screws into the clamps, and then fasten the screws onto the TV again.

- ➢ Screws may not be supplied with the product. In this case, please purchase the screws of the following specifications.

 Screw Specifications

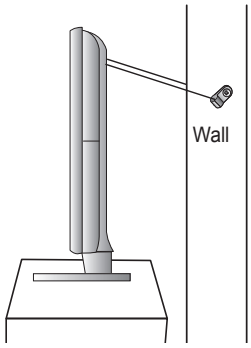
 - For a 17 ~ 29 Inch LCD TV: M4 X 15
 - For a 32 ~ 40 Inch LCD TV: M6 X 15



3. Connect the clamps fixed onto the TV and the clamps fixed onto the wall with a strong string and then tie the string tightly.

- ➢ Install the TV near to the wall so that it does not fall backwards.
- ➢ It is safe to connect the string so that the clamps fixed on the wall are equal to or lower than the clamps fixed on the TV.
- ➢ Untie the string before moving the TV.

4. Verify all connections are properly secured. Periodically check connections for any sign of fatigue for failure. If you have any doubt about the security of your connections,contact a professional installer.



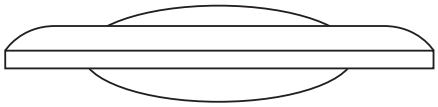
Specifications

Model Name	LN32A330J1N
Screen Size (Diagonal)	32 inches (31.5 inches measured diagonally)
PC Resolution	1360 x 768 @ 60 Hz
Sound Output	 10W x 2
Dimensions (WxDxH) Body With stand	 34.4 X 3.2 X 20.9 inches (874 X 81 X 532 mm) 34.4 X 11.5 X 22.7 inches (874 X 291 X 577 mm)
Weight With stand Without Stand	 12 kg (26.5 lbs) 9 kg (19.8 lbs)
Environmental Considerations Operating Temperature Operating Humidity Storage Temperature Storage Humidity	 50 °F to 104 °F (10 °C to 40 °C) 10% to 80%, non-condensing -4 °F to 113 °F (-20 °C to 45 °C) 5% to 95%, non-condensing
Stand Swivel (Left / Right)	 -20˚ ~ 20˚

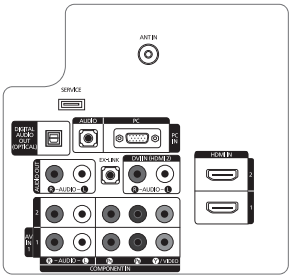
➢ Design and specifications are subject to change without prior notice.
➢ This device is a Class B digital apparatus.
➢ For the power supply and Power Consumption, refer to the label attached to the product.

Dimensions

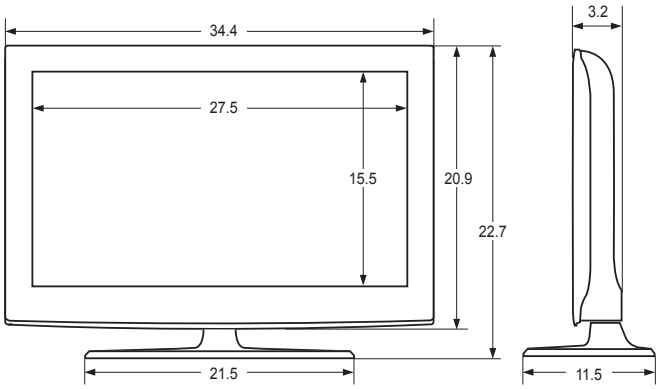
LN32A330J1N



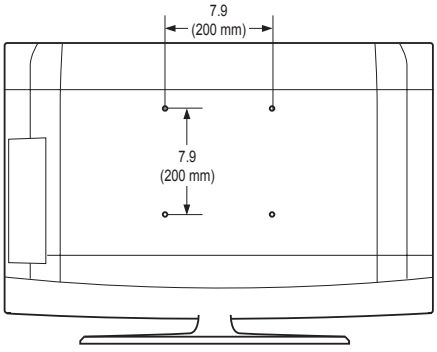
TOP VIEW



JACK PANEL DETAIL 6.0"W X 5.9"H



FRONT VIEW / SIDE VIEW



REAR VIEW

NOTE: All drawings are not necessarily to scale.
Some dimensions are subject to change without prior notice.
Refer to the dimensions prior to performing installation of your TV.
Not responsible for typographical or printed errors.
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